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THE EFFICACY OF A PREVOCATIONAL CURRICULUM AND SERVICES DESIGNED TO REHABILITATE SLOW LEARNERS WHO ARE SCHOOL DROPOUT, DELINQUENCY, AND UNEMPLOYMENT PRONE. FINAL REPORT.

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DESCRIPTORS- *SLOW LEARNERS, *PREVOCATIONAL EDUCATION, *DROPOUT PREVENTION, SOCIAL ADJUSTMENT, *SOCIALLY MALADJUSTED, *STUDENT REHABILITATION, POTENTIAL DROPOUTS, DELINQUENTS, DISADVANTAGED YOUTH, VOCATIONAL ADJUSTMENT, VOCATIONAL COUNSELING, WORK EXPERIENCE PROGRAMS, EXPERIMENTAL CURRICULUM, PROGRAM EVALUATION, RESEARCH PROJECTS, STUDENT CHARACTERISTICS, PROGRAM EFFECTIVENESS, DEMONSTRATION PROJECTS, CONTROL GROUPS, EXPERIMENTAL GROUPS, COMPARATIVE ANALYSIS, CHAMPAIGN, ILLINOIS,

IT WAS HYPOTHESIZED THAT 91 EXPERIMENTAL SUBJECTS FROM LOW SOCIOECONOMIC STATUS HOMES, PROVIDED WITH A CAREFULLY DESIGNED 2-YEAR VOCATIONALLY ORIENTED EDUCATIONAL PROGRAM AND PREVOCATIONAL DIVISION OF VOCATIONAL REHABILITATION (DVR) COUNSELING, WOULD HAVE SIGNIFICANTLY SUPERIOR ACHIEVEMENT TO THAT OF A MATCHED CONTROL GROUP ENROLLED IN A REGULAR EDUCATIONAL PROGRAM WITHOUT SUCH BENEFITS. DATA WERE COLLECTED FROM SCHOOL RECORDS, INTERVIEWS, CASE STUDIES, VARIOUS PSYCHOLOGICAL TESTS, AND DVR RECORDS. THE EXPERIMENTAL SUBJECTS HAD SIGNIFICANTLY BETTER ATTENDANCE AND FEWER SCHOOL DROPOUTS, AND MADE A BETTER VOCATIONAL ADJUSTMENT THAN THE CONTROL GROUP. THERE WAS NO SIGNIFICANT DIFFERENCE BETWEEN THE TWO GROUPS IN SOCIAL AND EMOTIONAL ADJUSTMENT AS MEASURED BY SOCIAL MATURITY, PERCEPTION OF PEER ACCEPTANCE, PERCEIVED ANXIETY, AND ABILITY TO DETERMINE THE APPROPRIATENESS OF CERTAIN ACTIVITIES OR GOALS. ACHIEVEMENT TEST SCORES FOR THE TOOL SUBJECTS OF ARITHMETIC, READING, AND SPELLING SHOWED NO SIGNIFICANT DIFFERENCES BETWEEN THE TWO GROUPS IN AMOUNT GAINED. SOME IMPLICATIONS FOR PROGRAM IMPLEMENTATION WERE THAT SPECIALLY TRAINED ADMINISTRATIVE AND TEACHING PERSONNEL SHOULD BE EMPLOYED FOR THIS KIND OF PROGRAM, THE RATIO OF TEACHER TO YOUTH SHOULD BE NO GREATER THAN ONE TO 20, AND THE CURRICULUM SHOULD BE FUNCTIONAL, INDIVIDUALIZED, AND VOCATIONALLY ORIENTED. A REVIEW OF RELATED LITERATURE, A COMPLETE PROGRAM DESCRIPTION, AND RECOMMENDATIONS FOR FURTHER RESEARCH AND PROGRAMING ARE INCLUDED. THE STUDY IS SUMMARIZED IN VT 004 114. (ET)

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The Efficacy of a Prevocational Curriculum and Services Designed to Rehabilitate Slow Learners Who Are School Drop Out, Delinquency, and Unemployment Prone

Research and Demonstration Project RD-1075

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CHAMPAIGN COMMUNITY UNIT IV SCHOOLS
CHAMPAIGN, ILLINOIS
and
VOCATIONAL REHABILITATION ADMINISTRATION
WASHINGTON, D. C.

AUGUST, 1966

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THE EFFICACY OF A PREVOCATIONAL CURRICULUM AND SERVICES DESIGNED TO REHABILITATE SLOW LEARNERS WHO ARE SCHOOL DROPOUT, DELINQUENCY, AND UNEMPLOYMENT PRONE

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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Final Report of Project RD–1075
Period Covered: September 1962 – September 1965

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TABLE OF CONTENTS

ACKNOWLEDGMENTS i

FOREWORD iii

CHAPTER I - THE PROBLEM 1

CHAPTER II - REVIEW OF RELATED LITERATURE 4

- Characteristics of the Dropout, Delinquent, and Unemployment Prone 4
- Programs Designed to Alleviate School Dropouts, Delinquency, and Unemployment 7
- Related Studies With Mentally Retarded Subjects 13

CHAPTER III - THEORETICAL ORIENTATION AND HYPOTHESES 15

CHAPTER IV - THE PROJECT PROGRAM 17

- Setting for the Project 17
- Physical Facilities 18
- Project Teachers 19
- Organization and Management of Classes 19
- Social Casework Services 20
- Prevocational Curriculum 21
- Progressive Work Experience Program 25

CHAPTER V - METHOD 36

- Overall Approach 36
- Population and Sample 36

CHAPTER VI - RESULTS AND DISCUSSION 41

- School Retention and Attendance 45
- Vocational Adjustment 47
- Social and Emotional Adjustment 57
- Achievement 70
- Additional Pertinent Findings 72

CHAPTER VII - CASE STUDIES 75

. Summary of Case Study Findings 75

. Case Studies 76

CHAPTER VIII - SUMMARY AND IMPLICATIONS 102

. Problem 102

. Organization of the Study 102

. Methods of Appraisal 103

. Results 105

. Additional Relevant Findings 105

. Implications 105

. Problems Encountered During the Course of the Study 109

. Recommendations for Further Research and Programming 111

LIST OF TABLES

TABLE: Page

I Characteristics of Subjects Selected for the Study 39

II Distribution of Initial Subjects by Race and Sex 39

III Mean IQ's of Total Groups, Moves, Dropouts .... 4[illegible]

IV Mean Socio-Economic Status of Total Groups, Moves, and Dropouts 42

V Distribution and Percentage of Dropouts From Initial Sample 43

VI Characteristics of Final Subject Population 44

VII Distribution of Dropouts Who Returned for Post Testing and Included in Statistical Analyses 44

VIII Number of Days Absent During the Year Before Entrance Into Project 46

IX Number of Days Absent During Last Year of Project 46

X Highest Level Job Held by Subjects Prior to Entrance in Project 48

XI Number of Part-time Jobs Held by Subjects Prior to Entrance in Project 48

XII Highest Level Part-time Job Held by Subjects During Project 49

XIII Number of Part-time Jobs Held During Project 49

XIV Highest Level Full-time Job Reportedly Held During Project 50

XV Post School Vocational Training Received by Subjects Who Graduated or Dropped Out of School 51

XVI Academic Training Needed to Attain Vocational Goal 52

XVII Percent of Subjects' Responses to Question, "What kind of information has helped you most in school?" 53

XVIII Mean Raw Scores - Minnesota Hand Tool Test 54

XIX Mean Raw Scores - Minnesota Clerical Test 55

XX Mean Raw Scores - Purdue Pegboard Test 55

XXI Mean Raw Scores - Digit Symbol Subtest of the Wechsler-Bellevue (Form II) 56

XXII Number of Contacts With Law Enforcement Agencies Prior to Entrance in Project 57

XXIII Number of Contacts With Law Enforcement Agencies During the Project Period 57

XXIV Severity of Offenses Prior to Entry in Project 58

XXV Severity of Offenses During Project Period 59

XXVI Mean Raw Scores - Vineland Social Maturity Scale 60

XXVII Mean Raw Scores - Perceived Peer Relationship Scale 60

XXVIII Mean Raw Scores - Taylor Manifest Anxiety Scale 61

XXIX Mean Raw Scores - "Could You Ever" Scale 62

XXX Results of Analysis of Differences Between Matched Pairs of Experimental and Control Subjects on California Psychological Inventory Pre Tests and Post-Pre Tests 63

XXXI Pre and Post Mean Standard Scores on the Socialization (So), Achievement via Conformity (AC) and Flexibility (Fx) Subtests of the California Psychological Inventory .. 64

XXXII Perception of Relative Length of Time Required to Complete Assignments 67

XXXIII Grade Level of Perceived Dislike for School 67

XXXIV Subject Area Chosen as "Best Liked" 68

XXXV Subject Area Selected as "Least Liked" 68

XXXVI Pre and Post Mean Scores on Stanford Achievement Tests .. 70

XXXVII Results of Stanford Achievement Tests 71

XXXVIII Analysis of Dropouts' Initial Scores on the Stanford Achievement Test 72

XXXIX Reported Physical Abnormalities of Subjects in the Project 73

XXXX Community Agencies to Whom Subject or Other Family Members are Known 74

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The Champaign Community Unit IV Schools have one of the most comprehensive programs for exceptional children in the nation. There are programs and services for the mentally handicapped (trainable and educable); for the physically handicapped (blind and partially seeing, deaf and hard-of-hearing); for the orthopedically handicapped; for children with learning disabilities; for the speech defective; for the multiply handicapped and for those with social and emotional problems. While some aspects of the program date back as early as 1934, the major portion of the program and services for the handicapped were initiated in the 1945-1946 school year. The programs and services were generally provided first at the elementary level and then as the pupils reached the junior and senior high schools, programs were made available to them.

As the programs and services for the handicapped expanded to the secondary level, there was a real concern as to whether or not the school was preparing these youth for subsequent vocational adjustment. A follow-up was conducted in 1959 of those handicapped youth who were formerly enrolled in the Champaign program and who had either dropped out of school or completed the prescribed program. The results of the survey clearly indicated that a goodly portion of the subjects were unemployed and more or less "vegetating" in their homes. Only a very small percentage were known to the Division of Vocational Rehabilitation (DVR).

Thus, it appeared that the weakest link in the educational program for the handicapped in the Champaign Schools was at the junior and senior high school levels. It was at these levels that the schools seemed to be failing to prepare adequately the handicapped for subsequent vocational adjustment. It appeared that the initial investment the schools had made in providing young handicapped children with an educational program was not being protected by providing youth at the secondary level with the prevocational curriculum and prevocational services necessary for them to make a smooth transition from the school to full-time employment in the community. There was little evidence that the schools had joined forces with such agencies as DVR and employment agencies in planning the youth's preparation for ultimate job placement. Unfortunately the agencies in the community were working independently instead of cooperatively. Thus, lack of coordination of services resulted in considerable delay between the time the handicapped youth left school and was seen by the appropriate agency. In some instances the youth never found his way to an agency who could be of assistance to him.

Concern for safeguarding their original investment in the handicapped and insuring the best possible vocational adjustment for the handicapped led the Champaign staff, in the spring of 1960, to submit a proposal to the Illinois State Division of Vocational Rehabilitation for an Extension and Improvement Grant, under section 3 of the Vocational Act of 1954 (Public Law 565), to extend and improve the prevocational education of the handicapped in the Champaign Schools by developing a program to assist the youth to bridge the gap between the school and full-time employment. This plan entailed a close working relationship between school personnel and the state agency and was focused on alleviating the weaknesses of the Champaign program.

The proposal was approved in September of 1960. The project provided for a prevocational coordinator, a full-time secretary, a social worker, and a psychologist. It also provided for the development of a system of record keeping and a resource library. In addition, the plans called for the organization of a Community Council for Employment of the Handicapped, and an In-School Council for Employment of the Handicapped. Vocational and personal counseling by a prevocational counselor and by a social worker on both an individual and on a group basis was an integral part of the planning as was work with parents of the handicapped.

The plan likewise included developing policies and procedures for insuring a close working relationship between the school and Vocational Rehabilitation.

It was felt that the prevocational staff, working closely with the special teachers, would bring about an improved prevocational curriculum and would foster the utilization of community resources to a greater extent.

One of the major aspects of this extension and improvement project was a follow-up of clients for a minimum of five years by the school and by the Division of Vocational Rehabilitation staff.

The proposed plan was approved and implemented during the 1960-1961 school year and was continued for the next two years. After one year, however, this program was so successful in holding handicapped youth in school and in providing the knowledge, attitudes and skills that are essential for good vocational adjustment, the superintendent, principals, regular teachers and parents requested that these services be extended to children who are not as a rule considered to be subjects for special education, the slow learners. As key personnel pointed out, "These children are now in more trouble than the handicapped because they do not have the special program, the progressive work experiences and services from the Division of Vocational Rehabilitation to hold them in school and insure their vocational adjustment". It was recognized that the slow learners, especially those from homes of low socio-economic status, are prone to dropout of school, to become delinquent, and to be unemployed because of marked educational retardation, severe social and emotional maladjustment, and poor worker traits, all of which constituted a severe vocational handicap.

With this encouragement from key personnel in the schools, this research and demonstration project was submitted to the Vocational Rehabilitation Administration in January of 1962, and was approved by the Federal Agency in the spring of the same year. In the fall of 1962 the project was initiated.

After this project designed to rehabilitate slow learners (IQ's 75-90) had been underway for two and a half years and had been approved for continuation by the Vocational Rehabilitation Administration for the fourth year, the secondary school principals discussed with the superintendent of schools and the project director the possibility of terminating the research. They were so enthusiastic about the obvious holding power and rehabilitation of experimental subjects that they wished to provide the prevocational curriculum and services to all slow learners in the school system at the junior and senior high school level who were in need of such a program. A careful study of the research data revealed that there was adequate but minimal data to evaluate the effectiveness of the project.

Although no statistical analysis of the data had been conducted at the time the decision was made to terminate the research phase of the project, the merits of the experimental program relative to increasing the holding power of the school and the vocational rehabilitation of the subjects seemed obvious to the school staff. Realizing the risk involved in seeking a premature decision before the detailed analysis of the data, but conscious of the expressed concern of the secondary principals for expanding rehabilitative services to larger numbers of slow learners, the project staff agreed to seek approval from the Vocational Rehabilitation Administration for terminating the research project. The agency approved the request to terminate the research.

During the late spring and summer of 1965, plans were made to provide the prevocational curriculum and services to slow learners in all junior and senior high schools in the district. A full-time staff member was employed to implement and supervise this program.

Educators have been severely criticized for the lag that exists between the findings of research and the incorporation of these findings into practice to improve educational programs. In this instance there was no delay in action.

It is hoped that the findings of this research project will not only be of assistance to the Champaign Schools in improving their educational offerings to the segment of the school population included in this study but will also be helpful in guiding other school systems in initiating and/or improving prevocational programs and services to school dropout, delinquency, and unemployment prone youth through a close working relationship between the public schools and Vocational Rehabilitation.

Chapter I

THE PROBLEM

Dropping out of school, delinquency, and unemployment are crucial problems with which society is faced. These problems have become a great national concern because of the general recognition of the fact that the very security of the nation may well depend upon the full and effective utilization, along constructive lines, of human resources. Between 30 to 40 per cent of the school population from grades 7 through 12 drop out of school. The effects of the absence of adequate schooling is seen as a threat to an individual's security as well as a threat to society. The school dropouts have great difficulty in getting a job. The possibility of their maintaining continuing employment is diminishing. Among school dropouts and youth who are unemployed, the incidence of delinquency is high. A significant number of school dropouts, delinquent, and unemployed youth are culturally disadvantaged and have intelligence quotients which fall within the range of the slow learner (IQ's from 75 to 90). These are the youth who have lower intellectual ability than the normal but are not as severely intellectually limited as the educable mentally retarded (IQ's ranging from 50 to 70).

There are approximately 80 million children in the United States. Of this number from 13 to 16 million are slow learners (17 to 20 per cent). By 1970, the Bureau of the Census predicts that the number of children under 21 years of age will be close to 86 million. Thus, we can anticipate that the number of slow learners will rise proportionately and reach the 14 to 17 million mark by the above mentioned date. It is imperative that the school and community agencies provide appropriate educational offerings and services for these youth so that they will remain in school and be provided with experiences that will enable them to earn a living, which is a prerequisite to adulthood, and become contributing members of society.

The slow rate of learning of these youth make it difficult for them to meet the standards imposed on them by the conventional academic curriculum which is geared, generally, to the average and above average learner. Especially is this true at the junior and senior high school levels. Not only do these slow learners fail to meet the standards of learning in the school, but they also fail to meet the standards for acceptable behavior. Lack of success experiences in the school literally "shoves" them out of school and into the community where they are likely to meet with employment failures and remain among the unemployed or unemployable.

Havighurst and Stiles (1961) in reference to the group of youth described by them as "alienated" state:

> The alienated is an appropriate name for this group because it expresses the fact that they are somewhat alien to the larger society in which they live. Such youths have been unsuccessful in meeting the standards set by society for them -- standards of learning in school, of performance on a job. By the time they reach adolescence these boys and girls are visible as the misfits in school. Either they are hostile and unruly, or passive and apathetic. They have quit learning and have dropped out of school

> psychologically two or three years before they can drop out physically.
>
> Most alienated youth come from low income homes; most of them fall in the IQ range 75-90; almost all drop out of school at age 16 or before; they tend to come from broken homes, or homes which are inadequate emotionally and culturally.

In testimony given by Abraham Ribicoff (1961), former Secretary of Health, Education, and Welfare, before a subcommittee concerned with a pending bill, he made this statement regarding the relevance of schooling to employment and social adjustment:

> The relation between inadequate schooling, difficulty in securing employment, and delinquency is an important one. As we have seen, the peak ages for delinquency come at the years when the young person is faced with transition between school and work. When his education is irrelevant and painful and the job market is retreating, the adolescent male is caught in a crossfire, and the lack of support in bridging the gap leaves him vulnerable to antisocial paths of action.

The concentration of unemployment is among the youth who are poorly educated and do not possess the necessary vocational skills to meet the demands of available jobs. At one time if a youth dropped out of school prior to graduation, there were job opportunities available to him. Today the chances of obtaining and maintaining a job are diminishing. With technological changes this situation is likely to become increasingly acute.

Technological changes are eliminating the use of unskilled labor at a faster pace than new uses of unskilled labor are being generated. Approximately one and a half million workers are displaced by automation yearly. Although new jobs are being created, displaced workers are not usually equipped to handle these new jobs because of their lack of formal education and training. The impact of these changes has profound implications for the education of all youth and especially for the slow learners who are predisposed to be school dropouts, delinquents, and unemployed since they usually have not acquired the prevocational knowledge, skills, attitudes and habits which are prerequisites to good vocational adjustment.

It appears to be crucial that the schools and such agencies as the Division of Vocational Rehabilitation work together and develop a prevocational curriculum and services which would hold these youth in school and would better prepare them for full-time employment in the community. Studies of causes of dropping out of school, delinquency, and unemployment strongly suggest the need for a different type of educational curriculum and services for this segment of our school population. Such learning activities must be meaningful to the youth and enable him to experience successes. These experiences must also promote adequate personal and social adjustment and the acquisition of the knowledge, skills, habits, and attitudes which are essential to becoming a successful employee. Closely supervised progressive work experience during school attendance appears to be an important part of a prevocational curriculum. Helping each youth bridge the gap between the school and placement on a full-time job in the community also seems to be of paramount importance. A follow-up of youth after they leave school is likewise essential in such planning.

The general problem with which this research is concerned is that of rehabilitating slow learners from homes of low socio-economic status who are prone to dropout of school, to become delinquent, and to be unemployed. The specific problem is that of testing the effectiveness of a prevocational curriculum and services designed to rehabilitate slow learners from low socio-economic status homes who are prone to be school dropouts, delinquents, and unemployed as contrasted with comparable youth who are provided with the conventional academic curriculum.

Chapter II

REVIEW OF RELATED LITERATURE

There have been numerous studies to determine what the school dropout, delinquent, and unemployed are like but little research has been conducted relative to how the school can increase its holding power, what the school can do to reduce delinquency and how the school together with appropriate agencies can help youth, especially slow learners, bridge the gap between the school and full-time employment. This review of the relevant literature is presented under three headings: (1) Characteristics of the Dropout, Delinquent, and Unemployment Prone, (2) Programs Designed to Alleviate School Dropout, Delinquency, and Unemployment, and (3) Related Studies With Mentally Retarded Subjects.

Characteristics of the Dropout, Delinquent, and Unemployment Prone

"There is clear evidence that early school withdrawal is linked with joblessness and unemployment", according to Tannebaum (1966). While all school dropouts are not unemployed and all unemployed youth are not juvenile delinquents, there is sufficient evidence to strongly suggest that there is commonality among the three and that they may be one and the same. The following represents related research on the characteristics of school dropouts, delinquents, and unemployment prone youth.

Below Average Intelligence

Lower intelligence is more characteristic of the dropouts than of the graduates. Generally their intelligence quotients fall within the range of the slow learner (IQ's from 75 to 90) according to such studies as Bowman and Matthews (1960), Jacobs (1954), Allen (1956), Ott (1959), Engebretson and Falk (1955), Dresher (1954), and Snepp (1956). According to Kvaraceus (1945), Merril (1947), Sheldon and Others (1949), and Healy and Bronner (1936), the mean IQ of delinquents is in the high 80's.

Low Socio-economic Status

Approximately 85 per cent of school dropouts come from families of low socioeconomic status according to such researchers as Bowman and Matthews (1960), Allen (1956), Jacobs (1954), Sheldon (1958), and Gregg (1950).

Schreiber (1954) reports that about two-thirds of the parents of dropouts are either hostile or indifferent toward school and more than 70 per cent of these parents failed to complete grade twelve. These findings are confirmed by Allen (1956), Dillon (1949), Ott (1959), and Gregg (1950).

Poor Social and Emotional Adjustment

Dropouts are usually not active in the extra-curricular activities of the school. They feel insecure and lack a feeling of belonging in school. Interviews with school dropouts reveal that they are dissatisfied with their social relationships in school and do not have friends. Generally the dropouts, as a group, are emotionally immature and socially retarded. According to a number of studies, teachers describe dropouts as either very aggressive or markedly withdrawn during their school attendance. [Bowman and Matthews (1960), Allen (1956), McCreary and Kitch (1953), Gregg (1950), Dresher (1954), and Snepp (1956).]

Rohrer (1964) after some years of studying psycho-social development and acting out behavior indicates some of the developmental factors that lead to symptomatic behaviors exhibited by the "school dropout". His description of these youth is as follows:

> One who has grown to mistrust other individuals; one who has had no significant adult figure to offer him emotional support; one who has been inculcated with the most primitive kinds of social values; one who has had to turn to peer groups in order to find someone with whom to relate emotionally; one who has developed feelings of isolation that lead to sporadic "acting out" in attempts to obtain those relationships; one who because of frustration strikes back at the perceived sources of frustration -- authority figures who have failed him or peer groups that have snubbed and enraged him; one who has been forced to grow overly dependent upon overcontrolling maternal figures who have not permitted him to develop a sense of self-reliance; and finally one who most of all is seeking out, albeit in an inadequate manner, ways of gratifying his need for affection and emotional warmth. This attempt at seeking out emotional warmth is perhaps most vividly portrayed in the large frequency of drop out due to pregnancy among adolescent girls. In the vast majority of the cases the pregnancy is not the result of sheer lust but an attempt to get emotional warmth and "closeness" from a second individual.

Educationally Retarded

Penty (1956) found that more than three times as many poor readers dropped out of school before graduation than good readers. She found that the peak period of the dropouts was during the tenth grade. The interview data she obtained from her subjects led her to conclude that reading played an important causal role in the dropout of pupils, especially in conjunction with other problems such as poor social and emotional adjustment.

In an interview with dropouts regarding reasons for their leaving school, Penty quotes some of her dropouts in her publication. An example is a girl with an intelligence quotient of 89. The reason for her dropping out of school was marriage. The statements made in the follow-up interview were: "We were always quarreling at home; I wasn't getting along in some subjects at school, either. I wanted to get married. I think now that marriage isn't always rosy. It is better for kids to finish school first. I understand what I read if I am interested in it. English and history were hard for me. I didn't know some of the words, so I couldn't understand what I was reading."

Another example given by Penty is a quote from a girl with an IQ of 78. "I didn't like World Problems. It was hard to understand. It was hard for me to write my thoughts, too. I didn't like to recite, either. I didn't like to read in school. I don't like to read now. I would get my work better in school when the teacher read aloud." The fact that dropouts are usually retarded in reading as well as in other skill areas and are usually overage for their grade because of retention in one or more grades has been confirmed by Allen (1956), Dillon (1949), Layton (1952), McCreary and Kitch (1953), Snepp (1956), Dresher (1954) and Gregg (1950).

As a general rule, dropouts usually fail several courses the year prior to their dropping out of school according to the findings of Dillon (1949), Ott (1959), Engebretson and Falk (1955), Dresher (1954), and Snepp (1956).

Bowman and Matthews (1960) in investigating the school adjustment of the dropout prone found that their subjects had difficulty in school dating back to their early school attendance. Their lack of school adjustment was manifested in many ways by the intermediate grades. By the time the dropout prone reached junior high they were severely handicapped in reading.

Poor School Attendance

Another of the findings of the Bowman and Matthews research (1960) was that the absence rate of the dropout increased as he went up the educational ladder. There was a marked increase in school absence from the junior high to the senior high level, especially during the last two years of the dropout's attendance. This finding is similar to those of McCreary and Kitch (1953), Gregg (1950), Dresher (1954), and Snepp (1956).

More Frequently Boys

Bowman and Matthews (1960) also found that the percentage of boys dropping out of school was higher than girls but the difference was not significant. Studies indicating that boys dropout of school more frequently than girls are those of Allen (1956), Jacobs (1954), Sheldon (1958), and Gregg (1959).

More Often From Minority Groups

Studies of the makeup of school dropouts reveal that the great majority come from minority groups. [Jacobs (1954); Sheldon (1958); Ott (1959); and Gregg 1950).]

Negative Attitude Toward School

The subjects of the Bowman and Matthews (1960) study openly expressed their dislike of school experiences, especially for junior high school. Dillon (1946) in his study of 1300 Indiana, Ohio and Michigan youth found that 69 per cent of the reasons secondary youth dropped out of school were attributed to factors directly related to the school. Likewise, Johnson and Legg (1949) discovered that the failure of the school to provide a curriculum and emotional environment with sufficient holding power accounted for 62 per cent of the reasons for youth leaving school before graduation. The findings of these two studies were supported by McCreary and Kitch (1953) where 57 per cent of the reasons given by California youth for dropping out of school were dissatisfaction with school.

Limited Work Experience

For many of the same reasons dropouts were unsuccessful in school so are they unsuccessful in holding part-time jobs while attending school according to Bowman and Matthews (1960). Compared to their controls who stayed in school, the dropouts obtained poorer jobs, according to this study. Approximately one-half of the dropouts obtained temporary jobs with no opportunity for advancement. The work adjustment of the dropout was poorer than his counterpart's who stayed in school. In summary, Bowman and Matthews state, "The dropout obtains a poorer job initially than the non-college control, makes a poorer work record, holds his job for a shorter period of time, and receives fewer advancements."

Jacobs (1954), Ott (1959), and Cantoni (1955) also found in their study of school dropouts that these youth had difficulty obtaining and maintaining a job.

Programs Designed to Alleviate School Dropouts, Delinquency and Unemployment

To reiterate, we know much more about the characteristics of the dropout prone than what to do to hold them in school and prevent the subsequent delinquency and unemployment that will be their lot if they do not acquire salable vocational attitudes, habits, and skills.

Bowman and Matthews (1960), as a result of their study on motivations of youth for leaving school, recommended that schools give serious consideration to grouping children with like abilities for instructional purposes, consider providing remedial teaching for those who need such special help, and offer group and individual counseling for pupils and parents. They stress making provisions for such early in the child's school attendance. Their recommendations for curricular adjustments include preparation of youth, especially boys, for vocational success by providing counseling and closely supervised work experience programs. For girls they recommend preparation for marriage and family living. These researchers particularly criticize the junior high school for not adequately meeting the needs of dropout prone students. They feel that the junior high school is not helping the potential dropout make an adequate transition from the elementary school to the junior high school to the senior high school.

The proceedings of the 1960 White House Conference made these recommendations in regard to school dropouts:

- That teachers and counselors in the elementary school be educated to identify and help potential dropouts at the earliest stage.

- That the school curriculum be made more interesting and meaningful with remedial and supportive services, especially for retarded and undermotivated youngsters, children of migrant workers, and other economically and culturally deprived families.

- That guidance services give more attention to potential dropouts at all levels, and that counselors stress the importance of education, motivate their ambitions, and encourage them to remain in school so that they will be better prepared for work.

- That parents be brought in to participate in educational and vocational planning with a qualified counselor at the time their children drop out.

- That school building facilities and personnel be available day and evening on a twelve-month basis to serve the remedial or vocational needs of dropouts.

Stebbins (1963) reports a personalized curriculum for potential dropouts in Flint, Michigan. The objectives of the Basic Curriculum plan are as follows:

- Personal Development: adequate self-image, wholesome attitudes, social skills.

- Vocational Orientation: preparation for job seeking, learning the qualities of good workers, job information, occupational training.

- Basic Citizenship Skills: American heritage, responsibilities of citizens, process of government, threats to democracy.

- Basic Academic Skills: reading improvement, practical arithmetic and mathematics, current science, and communication skills.

While there has not been a formal evaluation of this program, Stebbins states, "Their small but persistent successes in the core curriculum are elevating their opinions of themselves; children ingrained with inhibitions are becoming expressive. Their progress is not meteoric, but they are going forward, not backward."

Burchill (1962) presented a case book on work-study programs for alienated youth which was the outgrowth of a project conducted by Phi Delta Kappa designed to identify and illustrate outstanding work-study programs aimed at the prevention of delinquent behavior and at the rehabilitation of alienated youth. He reviews two of the Flint, Michigan programs -- a rehabilitation program initiated in 1960 conducted in the junior high schools and a voluntary work-education project for high school dropouts initiated in 1961. Because of shortage of space and difficulty in operating a work-study program during the day, an after school rehabilitation program was undertaken at the junior high level. After school the participants would report to two core area classes: reading-English, social studies-mathematics, sciences-health. These students reported in the afternoon for school and were enrolled in regular non-academic classes.

The objective of this program was to foster changed attitudes in the pupils so that they would eventually be able to resume full-time attendance in the regular program. The success of this program was to be evaluated in terms of growth in achievement as measured by standardized tests and changes in attitudes and social behavior as indicated by school personnel. The first test will be to determine how many are rehabilitated. This would entail attending regular classes and successfully coping with the regular school program.

The program at the senior high level was for school dropouts and involved school-job adjustment training. Classes were conducted on an informal basis for three hour periods a day. Course work emphasized knowledge and skills needed for subsequent employment. Students continued their academic training by enrolling in either senior high school or adult classes. The work experience aspect of this program consisted of work in the community for remuneration. Each job was set up for a span of six weeks. The employer paid the student a wage. Training was adapted to the needs and capacities of individuals. The program was a non-credit one, but school personnel continued counseling the students.

Both programs have indications of accomplishments although at the time of Burchill's publication (1962) no statistical analyses of data were reported. No other report was located in the literature relative to these programs.

Another program reported by Burchill is the Mount Diablo, California project involving a two-phase program to provide high school youth with exploratory work experiences including in-school and out-of-school work. This program was initiated in 1952. While this program did not deal exclusively with the same type of youth, no doubt many were comparable to those in the Champaign study. Work experiences were felt to be worthwhile for all students. Results were reported in terms of case studies. The director of the program, according to Burchill (1962), had this to say about the program:

> Work experiences help in the adjustment of youngsters in an important developmental stage. They learn to adjust in real life situations. They achieve some degree of independence in which they must live with themselves and at the same time get along with other people.

Santa Barbara, California provides still another example of an outstanding work-study program (Burchill, 1962). There six high schools cooperate to provide their youth with the opportunity to explore the world of work. This program dates back to 1953 and provides vocational counseling, job placement, and work experiences for youth. The exploratory work is done during the day and supervised by school personnel. They receive school credit but no pay. The vocational work-experience program phase is set up to provide experience for the youth that is directly related to the occupation they want to enter after they terminate their formal education. The program has been evaluated with funds provided by the Rosenberg Foundation to the Citizen's Advisory Committee. The research included a questionnaire evaluation of the program and sub-study involving differences between students in the program and those who had not participated in the program. More than 1500 students had participated in the program at the time of the evaluation. The overall evaluation indicated that the work experience program was a successful one according to responses on the questionnaire. Parents, teachers, employers, and students served as respondents. One interesting finding is that almost fifty per cent of the teachers said the work-experience programs had "no effect" on their courses. Forty-five per cent stated that they noted "some" effect such as they provided topics or problems for discussion, they provided motivation for additional interest in courses, and provided a basis for more utilization of community resources. There seemed to be superiority of the male participants in the program over non-participants centering around such factors as satisfaction with present job, weekly salaries, agreement of high school interest, inventory scores with fields of occupation chosen, etc. No differences, however, reached statistical significance. One finding between the two groups of females was that the non-participants had a higher incidence of marriage within three or four years after graduation from high school. There was a higher incidence of students who entered college among the non-participants.

This study differs from the Champaign study in many respects, one being that a wide range of intelligence was found among the students in the experimental program. The supervision of the program was not comparable. Another limitation was lack of close coordination between school and work experiences. Employers recommended that course work be more related to job experience and suggested that special classes be organized for the work experience program. Parents recommended that only employers be selected who had a sincere interest in the pupils.

Burchill (1962) also includes the Champaign Prevocational Services for the Handicapped as among the nine outstanding work experience programs in the country. Here, again, this extension and improvement program for the handicapped was not set up on a research basis although case histories point up forcibly the worth of the program in helping handicapped youth (mentally retarded, physically, and socially and emotionally handicapped) make a smooth transition from the school to full-time employment.

The Rochester, New York school-work program for slow learners was also included in the case book of outstanding work-study programs by Burchill (1962). The program includes slow learners (IQ's 76 - 89) and has many similarities to Champaign's prevocational program for the handicapped. One difference is that the teacher also serves as work supervisor. Only subjective evaluation has been made to date, but the staff feels that this program has increased the school's holding power. No mention was made of a working relationship with the Division of Vocational Rehabilitation.

New York City's work experience program was likewise cited by Burchill (1962). This program was initiated in 1955 and was designed to prevent juvenile delinquency at the senior high level. The overall design of the program is a functional curriculum with emphasis on job orientation and the basic fundamental skills of communication, reading and arithmetic necessary for job adjustment. In addition to attending the core program of the project, youth were also enrolled in physical education classes of the regular program. They usually attended one regular class outside of work education. The coordinators of this program also act as classroom teachers. Curricular materials and units of work have been developed by the staff. Case study material indicates that this program is worthwhile.

The ninth case reviewed by Burchill (1962) is that of Kansas City, Missouri. This program was started in 1961 with supporting funds from the Ford Foundation. Junior high level alienated youth were included in this program. They continue school on a half-day basis and work one-half day on a paid basis. When they reach seventeen they work full-time on regular community jobs, and receive supervision from the school. The project is scheduled to run to 1969. The major evaluation of this study will involve regularity of attendance, conditions associated with school dropout, achievement, personal and social adjustment, attitudes toward school, self-concepts and vocational aspiration, job adjustment, and work competence at the close of the experiment.

A research project which had some similarities to that of the present investigation is that of Longstreth, Stanley, and Rice (1964). The problem of this study was to determine if the following characteristics would increase the holding power of the school: (1) a curriculum designed to appeal to the potential dropout, (2) a stable pupil-teacher relationship, (3) a counselor who was immediately available, and (4) afternoon jobs for pay and school credit.

Subjects were selected for inclusion in the program based on school records of excessive truancy and tardiness, retardation in basic academic skills, and poor academic grades. Candidates were classified as either aggressive or passive in an attempt to form homogeneous groups. All candidates but four had finished the ninth grade. All students were within the normal range of intelligence as determined by the California Test of Mental Maturity.

Following their classification as passive or aggressive they were further subdivided in terms of last school attended (there were only two schools). Within the subgroups they were rank-ordered in terms of age. The first student on each list was then assigned to either the experimental or control group and the second student to the other group, and so on until all students were assigned. Following this, pairs of experimental and control subjects were matched on the basis of IQ, age, last school attended, and aggressive-passive classification.

Two experimental classes of approximately 15 students each were formed. Each class consisted of about one-third aggressive and two-thirds passive students. Teachers were selected on the basis of reputation for being a good teacher, an expressed interest and some prior experience in working with deviate students.

A dropout was defined as any student who dropped out of school before graduation unless another school requested his cumulative record. Contacts were made to schools requesting cumulative records. If the student failed to enroll, he was considered a dropout.

Interviews with both experimental and control students were conducted in a "before" and "after" fashion regarding the school year just completed. The first interview was conducted concerning the year prior to the inception of the program.

Police data were gathered for a period of 14 months prior to the inception of the program and for the 14 months following the time the student left the program. The results of the study were as follows:

- Almost exactly the proportion of experimental students dropped from school (57%) as control students (60%).

- A greater proportion of the aggressive students in both the experimental and control groups dropped from school (68%) than passive students (52%), although this difference is not quite statistically significant.

- Experimental students significantly improved in attitudes about school, however, not sufficiently enough to remain in school. Also, the experimental aggressive students had the poorest initial attitudes about school, but showed the most increase in improved attitudes. A slight decline in attitudes about school was found with the experimental passive group. Declines for both aggressive and passive controls were noted.

- There was no significant reduction in the number of police contacts by the experimental group. Both experimental and control aggressive students had more such contact than the passive students in both groups.

This study differs from the Champaign study in several ways. First, the intelligence range differed. The Champaign study concentrated on slow learners only. The work experience program was supplementary to the classroom experiences rather than a focal point of the curriculum. There was not a highly developed and sequentially organized work experience program. No mention was made of a close working relationship with Vocational Rehabilitation, possibly because these youth might not have been eligible for DVR services.

In 1963 a Curriculum Demonstration Program was initiated by Southern Illinois University in cooperation with the Quincy public schools and the U.S. Office of Education with Dr. Frank D. Sorenson as project coordinator and Charles Matthews as the administrative director. This project is more similar to the research study being reported in this publication than any other study known to the researchers. The objectives of the Quincy project (1964) are as follows:

- To meet the needs of the unsuccessful slow learner for vocational preparedness.
- To retain the slow learning, socially alienated students in the school program through the twelfth year.
- To provide opportunity for, and guidance toward, adequate personal and emotional development for the failure-prone student.
- To articulate and facilitate the transition of the slow learning student between the elementary school, junior high school, senior high school, the world of work, responsible citizenship and family living.
- To gain parent understanding, cooperation and support in attempting to provide the most meaningful curriculum program for the student.

While the project has not been reported in the literature, a status report submitted to the U.S. Office of Education gives some tentative findings. At the closing of the 1963-1964 school year, after one year of treatment, seventh grade students made significant increases in mathematical skills as measured by the California Achievement Test. An interesting finding was that the slowest or least able students exhibited the greatest gains. The experimental subjects gained 1.74 years as compared to .38 years for the control subjects. It was found that reading achievement was more resistant to change. The researchers expressed the feeling that change might be noted over a longer period of time.

Although no statistical analysis was made of the holding power of the school, it was felt by school authorities that the experimental program had prevented a substantial per cent of dropouts.

As is true of the Champaign study, the Quincy subjects are provided with progressive work experiences and a special curriculum. In addition there is a school training center (service station) which is used to promote various skills and to facilitate the vocational adjustment of students. An interesting aspect of the project is the home visitations under the direction and coordination of a parent-school coordinator. The goal of parent visitations is to improve parental understanding of the child and school program and their attitudes toward them. This project will be continued until June of 1968. Like the Champaign project, the Quincy project has a working relationship with the Division of Vocational Rehabilitation. In this instance, partial support for the trainees enrolled in this prevocational training laboratory is obtained from DVR. No information is available to date regarding the effectiveness of the progressive work program in promoting improved vocational adjustment among the subjects involved.

Related Studies With Mentally Retarded Subjects

While the slow learner is more capable intellectually than the mentally retarded, he is confronted with many of the same problems in securing a job, especially if he has not completed his schooling. For this reason selected studies on retardates will be reviewed.

A few studies have attempted to compare the retardate with the normal to determine differences in social and occupational adjustment. The ones most frequently cited are Fairbanks (1933), Baller (1936), and Kennedy (1948). As would be anticipated, the results of these studies differed in some respects because of varying economic conditions. The findings of the three studies are in agreement on the following: (1) The majority of educable mentally handicapped youth can make an acceptable social and occupational adjustment in their communities. (2) The economic conditions and job opportunities in a given community determine the extent to which the mentally handicapped are employed. When there is a depression, they are prone to lose their jobs more frequently than during normal times. (3) The mentally retarded obtain jobs that can be classified as unskilled or semi-skilled. (4) There seems to be a relationship between the mores of a community and the adjustment of the mentally retarded. (5) Social-economic status of the family seems to play an important role in the adjustment of the mentally retarded child.

A more recent study comparing mental retardates who were former special class students with normal subjects of comparable age was conducted by Peterson and Smith (1960). The mean IQ of the mentally retarded was 65 and the mean IQ of the normal was 103. The major findings of this study were that the mentally retarded left school earlier, held jobs requiring less skill, more frequently changed jobs, were paid lower wages, had inferior housing and less frequently owned their own homes, were more frequently involved with law enforcing officers and for more serious offenses, and had a higher rate of divorce.

Kolstoe (1961) studied the differences between 41 mentally handicapped subjects who were employed and 41 subjects who were unemployed. All subjects had been clients of an employment evaluation and training project. He found that there was a significant difference among the employed group in those characteristics associated with personality, social adjustment, work characteristics, and physical factors. Ogden (1951) also found that personal factors were more frequently causes of dismissal than intelligence or ability to meet the standards of work.

Peckham (1951) conducted a study to determine why the mentally retarded quit their jobs. Ridicule and teasing seemed to be predominantly the reasons given. He also reported that the retarded tend to be lacking in social skills and certain job expectancy habits which were manifested in not adhering to certain rules, dressing inappropriately, exhibiting immature behavior and failing to be punctual. These studies indicate that lack of acceptance by co-workers is the prime reason for job changing by the retarded.

Neff (1959) found that the degree of support in the home influenced the mentally handicapped client's employment. The acceptance, understanding and support of the family are important factors which influence the adjustment of the handicapped youth. Deno (1965) reporting on a project supported by the Vocational Rehabilitation Administration on the rehabilitation needs of school age retarded youth stated that the findings of the Minneapolis study suggested that vocational preparation needs to include provisions for personal-social adjustment training.

The present study differs from other research studies reported in the literature in the following respects:

- A matched pair research design is used to evaluate the effectiveness of the prevocational curriculum and services.

- The teachers have a vocational education background and have also taken work in special education.

- The curriculum is tailor-made for each subject based on a complete psycho-educational, social and vocational study.

- Individual and group social casework is provided for the subjects and for their parents.

- A prevocational counselor is available for the In-School Work Experience phase of the program and one is also available for the Community Work-Experience program. A prevocational coordinator is responsible for supervising and coordinating the program and works closely with the Division of Vocational Rehabilitation.

- Specially designed physical facilities were provided for the project.

Chapter III

THEORETICAL ORIENTATION AND HYPOTHESES

This study is based on the premise that behavior is learned and thus can be modified by appropriate training. Furthermore, it is believed that when a youth experiences success at a given task, he will approach similar tasks with greater confidence and anticipation of success. On the other hand, when a youth fails at a task, he will anticipate failure and will avoid attempting similar tasks.

Youth of low socio-economic status come from an environment that is quite unlike that of the middle class academically oriented school. One result of this discrepancy is that they frequently cannot understand expectations established by the school. Failure and resistance to school are unfortunate outcomes.

It was assumed that there is a range of basic capacities to learn inherent in disadvantaged youth, as is true of youth from any socio-economic level. It was acknowledged, however, that culturally disadvantaged youth, as a group, have learning deficits resulting from their cultural deprivation.

In addition to the problems associated with social dissonance and learning deficits resulting from lack of intellectual stimulation, it was further assumed that since the youth selected for this project were functioning at a "dull" intellectual level, they would have additional deficits in their ability to process information. Consequently, enrollment in a regular educational program would result in inevitable failure. Youth who fail frequently in school for any reason become alienated and are often prone to seek release from this punishing environment by dropping out of school.

It was believed that if these youth were specifically taught to process information more effectively through an educational program which is vocationally oriented and meaningful to them, yet within the limits of their ability, then the youth would be successful and develop positive approach attitudes toward learning. Such a change in attitude should result in a change of behavior from one of leaving school without future plans, to one of staying in school coupled with a positive attitude toward entrance into an appropriate occupation, which might involve post high school trade training.

Since the basic goal for these youth is vocational rehabilitation and since a high school education is an important step toward vocational rehabilitation, it was felt to be imperative to reduce strongly negativistic attitudes toward school and to replace such attitudes with more positive attitudes toward school. Thus, it was decided to attempt to modify behavior by placing the experimental youth in a vocationally oriented program where the focal point is a progressive work experience program in which success was frequent and where support and counseling were available when failure occurred.

Such a treatment program was expected to increase the school's holding power, prevent juvenile delinquency and other types of maladjustive behavior, and to promote the acquisition of attitudes, skills, and knowledge conducive to the youth taking their place in the world of work as contributing members of the adult society.

Specifically, it was hypothesized that experimental subjects who were provided with a carefully designed vocationally oriented educational program and with the services of a prevocational counselor and counselor of the Division of Vocational Rehabilitation would be significantly superior to their counterparts who served as controls and were enrolled in a regular educational program without such benefits, in the following respects:

- School retention and attendance as determined by school records and data obtained from follow-up interviews.
- Vocational adjustment as determined by progressive work experience while in school, and post school training and employment records after leaving school.
- Social and emotional adjustment as assessed by an Appropriate Tasks Scale, an Inappropriate Tasks Scale, the Vineland Social Maturity Scale, a Perceived Peer Acceptance Scale, the Taylor Manifest Anxiety Scale, the California Psychological Inventory, law enforcement records, and a structured interview designed to obtain information on attitudes toward school, teachers, classmates, leisure time.
- Academic achievement as measured by the Stanford-Achievement Test.
- Eye-hand coordination as measured by the Purdue Peg Board, Minnesota Hand Tool Dexterity Tests, Minnesota Clerical Test, and the Digit Symbol subtest of the Wechsler-Bellevue Scale, Form II.

In addition to testing the above hypotheses, other pertinent and relevant data are reported.

Chapter IV

THE PROJECT PROGRAM

Setting For The Project

The City of Champaign is located in east central Illinois approximately 125 miles south of Chicago and 40 miles from the Illinois-Indiana state line. Champaign (population 50,000) is the business center for a metropolitan area of 100,000 people which includes the twin city of Urbana (population 25,000).

Champaign is a cultural center having the state land grant college, the University of Illinois, serving as a stimulus to the community. The University of Illinois is the largest employer in the area, currently employing approximately 9,000 persons serving 28,000 students. In addition, Chanute Air Force Base, the largest air force technical training base in the world, is located 15 miles north of Champaign.

The Champaign Community Unit District IV Schools is a unit district offering programs from K-12 in addition to a developing adult education program. Unit IV Schools serve the City of Champaign and approximately 83 square miles of rural territory. Current enrollment is more than 12,000 pupils.

The pupil population in Champaign is bi-modal, characterized by a large number of very bright and above average pupils and a corresponding significant number of non-academically oriented, culturally deprived children. Many of the latter pupils have newly arrived in Champaign from various southern states where they did not receive an education geared to their ability and needs. Consequently, many of these slow learning pupils are also academically hostile.

Further complicating the educational picture of these pupils is the economic necessity for early employment to assist in supporting themselves and contributing to the support of their family. In addition, the parents of these pupils are characterized by limited or no educational skills which result in their obtaining unskilled jobs and facing frequent layoffs. Thus, it is necessary for the economic livelihood of the family for the youngsters to seek employment at an early age. Each day the youth must make a decision between long term vocational objectives or a full stomach.

Before the initiation of this project, slow learning, dropout prone youth were expected to enroll in regular academic and vocational classes in competition with the other extreme of the bi-modal pupil population--the above average pupil. Limited vocational counseling services were available to these youth. The opportunity for inclusion in a work-study program was remote and then available only in the junior and senior year on an academically competitive basis.

The Champaign Schools were acutely aware of this untenable situation for slow learning youth and committed themselves to ameliorate the situation. Staff of the Champaign Schools who were research oriented, program conscious and vocationally trained joined forces to develop a logical solution to the problem.

It was readily apparent that these slow learning, delinquent prone youth were in need of the rehabilitative services provided by the Illinois Division of Vocational Rehabilitation as much as were the mentally and physically handicapped pupils with whom the Champaign Schools and Illinois Division of Vocational Rehabilitation had been working cooperatively for two years. Exploratory meetings were held with the local DVR Counselor, Mr. Emmerson V. Dexter. His personal and professional enthusiasm inspired school personnel to enlist the assistance of staff members of the state and regional office of Vocational Rehabilitation. Several planning sessions were held in Champaign, Springfield, and Chicago with Mr. Stanley Hedstrom, Mr. Alfred Slicer, Mrs. Grace Sims Moyer, Mr. Vito Caleca, Mr. Harry Troop, and Mr. Bernard Benoit, who were respectively: Region V Representative, VRA; Director, IDVR; Assistant Director, IDVR; Deputy Director, Program and Staff Development, IDVR; Deputy Director, Client Services and Special Programs, IDVR; Regional Supervisor, IDVR. The professional manner in which cooperation, procedures, and responsibilities were delineated was impressive.

Dr. E.H. Mellon, Superintendent of Schools, and the Board of Education were kept aware of the developing project plans and enthusiastically supported this cooperative merger of the two agencies dedicated to the total rehabilitation of all vocationally handicapped youth.

To explain the project to the eligible pupils and their parents, to school personnel, agency personnel, and to the lay public, the project was referred to as the YOUTH Project which is an abbreviation for Your Occupation, Understanding, Training, and Habilitation.

Physical Facilities

Since no existing classrooms were suitable to carry out the intent of this project, it was necessary to renovate space that could be made available. Remodeling consisted of painting and installing partitions, accoustical ceilings, tile floors, heating equipment and new lighting fixtures. Specially designed facilities for this project included occupational arts laboratories which provided for a family living area closely approximating the facilities of a home and an industrial arts laboratory designed to enable the youth to develop and mass produce small projects in wood, metal, clay, and leather.

The educational needs of the youth and the type of instruction to be carried out in the classrooms were taken into consideration in purchasing furniture and equipment. For example, classrooms were equipped with trapezoidal tables and individual chairs which could be arranged in many variations to best suit instructional needs.

Stimulation for learning was enhanced by the use of audio-visual aids. Such equipment as a 16 mm sound projector, opaque projector, tape recorders, record player, and slide and film strip projectors were purchased. Typewriters were purchased for use by the remedial teacher to foster the acquisition of skills in which youth were deficient and to help some youth acquire these specific vocational skills. Adding machines, a book stitcher, cash register, mimeograph machine, and spirit duplicator were purchased to teach youth the operation of these machines prior to their placement on In-School and Community Work Experience jobs requiring such skills.

Project Teachers

Teachers of the special classes were carefully chosen with consideration being given to both their professional training and personal characteristics. As a part of their formal training teachers had course work in a vocational area--agriculture, home economics, industrial education, and business education. In addition, they were required to take course work in special education with emphasis on mental retardation.

One outcome of this project was the belief that personality characteristics of the teacher were even more important than formal training. To be successful in working with these youth, the teacher has to respect them and perceive them as being capable of growth. He must be interested in learning as much as possible about his pupils so that he can gain a better understanding of their strengths as well as their apparent weakness. Past experience with comparable youth led staff to the conviction that teachers will not be successful if they try to impose their middle class standards on these youth.

The teachers of these children must be flexible and creative in developing and trying new approaches to get through to these youth since traditional approaches have failed. It takes a stable individual to be able to accept these youth and not interpret their hostility as being directed against them personally.

Niemeyer (1966), discussing the Bank Street experiment with disadvantaged children, makes this statement:

> Our hypothesis is that the chief cause of the low achievement of the children of alienated groups is the fact that far too many teachers and principals honestly believe that these children are educable only to an extremely limited extent. And when teachers have a low expectation level for their children's learning, the children seldom exceed that expectation, which is a self-fulfilling prophecy. A logical concomitant to this hypothesis is the conclusion that the problems of these schools will not be solved simply through "more services" or "changing family background" but through a functional, and probably structural, reorganization of the schools themselves.

In addition, successful teachers of dropout prone are those who really like to work with these youth. Neimeyer (1966) says that the teacher must get personally involved. ".... lack of involvement is a problem of our whole society at present, there is no better place to initiate personal involvement than in educating those students with whom the schools have so far been unsuccessful."

Organization and Management of Classes

The majority of the classes in which the subjects were enrolled were taught by project teachers. Nevertheless, each pupil's scheduling was carefully planned so that if he were interested in and capable of successfully coping with the curriculum of a particular regular class, scheduling in this class could be accomplished. For example, a youth might be particularly talented in art and request that he be enrolled in a crafts class. This was possible within the framework of the experimental program. In certain instances, youth were insistent upon being enrolled in a regular class even though school personnel questioned their ability to succeed in this class. Trial placement was then arranged after careful interpretation to the youth of difficulties he might encounter. The youth understood that the placement was on a trial basis and that if he were unsuccessful he could be rescheduled into an appropriate project class.

Since these youth came from family backgrounds where disorganization and disorder are the rule, it is of little wonder that they were so difficult to control in the school setting. Thus, the teacher-pupil ratio in the project classes of approximately one to twenty was necessary because these youth needed more individualized instruction and attention than was possible in larger classes.

Routines were kept constant and the classroom environment was highly structured. It was important for these youth to have a consistent school milieu in which they clearly understood the rules, regulations, and procedures which they were expected to follow.

These youth generally did not have adequate inner controls. They could not handle too much freedom and thus, responded best to firm, consistent handling by a mature, accepting and supporting individual. They tended to constantly test the limits and needed to know that an adult was strong enough to help them do what was expected of them.

Social workers were available to project staff on a consultative basis to help them better understand the dynamics of an individual's maladjustive behavior. In addition, social workers worked with individual and groups of subjects and their parents on social and emotional problems that were interfering with the adjustment of the youth in the classroom.

Social Casework Services

Social workers worked with individual youth and with groups of youth enrolled in the experimental program. The major emphasis of the casework service centered around amelioration of social and emotional maladjustive behavior. This was felt to be important since the major goal of the project was ultimate vocational adjustment and since research has shown that social and emotional problems interfere with job adjustment more than low intelligence or inability to perform the job.

The social workers assigned to the project had masters degrees and were graduates of approved schools of social work. Their previous experiences with similar youth in settlement houses, mental hospitals, and juvenile detention facilities enabled them to contribute immeasurably to the achievement of the goals of the program. The problems of the youth were manifested in four general settings: in the school, the home, the community, and on the job.

The social workers worked closely with other project staff members, with parents, and with community agency personnel to facilitate the best possible adjustment of these youth.

In the school setting the major reasons for referral to the social worker centered around acting out behavior in the classroom, defiance of authority and disregard for school rules, tardiness and absence without justifiable cause, poor motivation, peer rejection and conflict, sexual problems, stealing and the like. The social casework methods and techniques used varied in accordance with the problem and its severity. The casework was coordinated with the efforts of other project team members to insure coordination of services and safeguard against unnecessary duplication or lack of consistency.

Problems that came to the attention of the social workers which presented themselves in the home were sibling rivalry, lack of parental control, lack of understanding of the youth, poor attitudes toward education, lack of knowledge of how to help their child, and similar problems.

All parents of experimental subjects were seen by a social worker before the youth was admitted to the project. At this time a social history was obtained. Observations of the physical environment and emotional climate of the home was made. In addition, pertinent information was obtained from social agencies, records in the cumulative folders, and information from the social workers files. Social casework was provided for parents on an individual basis when requested by parents, recommended by project staff, or felt to be vital by the social workers.

Groups of parents of experimental subjects met with a social worker on a regularly scheduled basis to discuss problems of concern to them relative to their child. A social worker specifically trained in group work was responsible for this aspect of social work.

Problems that manifested themselves in the community were oftentimes reasons for referral to the social workers. These project staff members maintained close contact with law enforcement personnel and social agencies. Problems of concern to social workers regarding adjustment of subjects in the community included acts of delinquency, unwise use of leisure time, and membership in a gang.

Of particular concern were social and emotional problems affecting adjustment on the job. The prevocational counselor referred such cases to the social worker and close communication was maintained between these two staff members to insure a coordinated effort and the ultimate adjustment of the youth on the job. In many cases the DVR counselor was directly involved and in all cases he was kept informed.

Prevocational Curriculum

The subjects in this research program had long histories of school failure and retention. Their attitudes toward learning as well as their attitudes toward teachers and authority figures in the school were negative. They especially manifested a dislike of text books, had poor work habits, poor powers of concentration, inadequate communication skills, lack of sustained interest in and persistence at a task until completion, and poor command of the fundamental skills of reading, grammar, spelling, and mathematics. Their frustration level was low and they were easily discouraged.

Since one if not the major problem of these youth is motivational, it was apparent to project staff that a radically different approach would be essential to hold these youth in school and to promote their desire to learn. Thus, on the basis of what was known about these youth, the following principles served as guides in the development of the curriculum for these slow learners who were school dropout, delinquency, and unemployment prone:

- The curriculum must be meaningful to these youth to gain and hold their interest

The aspiring mechanic whose immediate desire is to own a motor scooter is more receptive to reading material on gas engines than he is to read literature such as Macbeth. Likewise, a gasoline station helper in the Community Work-Experience phase of the program who is having difficulty determining how to compute the state excise tax is more amenable to academic drill relative to solving his concrete mathematical problems than he is to the completion of a workbook sheet of isolated problems which has little meaning to him.

- The readiness of the individual to successfully engage in the learning activities is an important consideration

Expectations which disregard the experiential background and level of skills of the individual result in frustration and failure. The curriculum must take into consideration the youth's readiness to engage in a given learning activity. For example, it would be inappropriate for a teacher to assign a written treatise on a subject such as "A Comparison of the Cultures of Ancient Greece and Rome", for three obvious reasons: (1) the youth would not have acquired the necessary concepts; (2) his reading level would not allow him to make the depth study necessary to make comparisons; and (3) he would not have the communication skills necessary to express himself well enough to attack this problem. In fact, these youth have difficulty writing even the simple sentences necessary to express elementary concepts.

- The curriculum must provide youth with success experiences which result in a sense of accomplishment

Since these youth have had a preponderance of failures, it is important for them to experience success. These successes must be not only recognizable by the learner but by his peers and significant adults. Teachers who work with dropout prone youth must plan activities carefully, especially in the initial stages of the program, where success is imperative. The old adage that "nothing succeeds like success" cannot be over-emphasized when working with slow learning youth. As confidence is built up, the teacher can gradually increase the difficulty of the task to the extent that it is challenging but not unattainable. To set realistic goals for himself, a youth must experience success. If all tasks lead to failure, then a youth is not able to determine what he can succeed in doing.

- Promotion of the youth's understanding of himself and an acceptance of his strengths and weaknesses is an important aspect of a prevocational curriculum

To set realistic vocational goals, one has to have a realistic concept of one's self which includes a recognition and acceptance of one's strengths as well as his weaknesses. A slow learner who aspires to be a medical doctor obviously does not understand himself in relation to his vocational potential. On the other hand, such a youth who feels that all he can do is to be a dishwasher may be equally unrealistic in evaluating himself and his vocational potential.

- The curriculum must promote improved mental health which is associated with positive attitudes toward school and society

A functional curriculum geared to the ability level of the youth and focused on needs engenders feelings of adequacy and promotes favorable attitudes toward self and others. Positive school experiences tend to generalize to the larger society.

- Emphasis on real life needs to insure that the youth's school experiences are closely related to his immediate work experience is a crucial curricular consideration

The school has a unique opportunity to provide these youth with meaningful work experiences and classroom learning experiences which are mutually reinforcing. For example, a youth learns in the classroom what is expected of a good employee at the time he is seeking employment in the initial phase of the In-School Work Experience program. Part-time employment in the work experience program presents him with the opportunity to put into practice the knowledge gained in the classroom and to identify areas where he is deficient so that he can obtain further help in acquiring additional academic and/or personal social skills.

- The curriculum cannot be dictated by commercially prepared instructional materials

There is a paucity of appropriate commercially prepared instructional materials for slow learners. Teachers must select, adapt, and prepare instructional materials geared to the needs of the learners and compatible with the goals of the program.

- Provisions should be made for mastery of materials before new learnings are introduced

The amount of material covered is not nearly as important as thoroughly learning some carefully selected fundamental knowledge or processes that can be readily and immediately applied. Too many new ideas or processes introduced without sufficient overlearning are disintegrative rather than integrative. For example, while it is important for a youth to be able to complete an application form, to open a bank account, and to budget his money, to introduce all such concepts and processes simultaneously would not be conducive to the mastery and retention of any one of them.

- Provision for structure to insure systematic and sequential learning is essential in curriculum building

The progressive work experience program provides experiences within a structured framework which progresses from closely supervised in-school work experiences, to part-time work in the community, to full-time employment.

- The curriculum must provide for a physical or motoric approach to insure learning

Such a youth seems to learn more readily when he is physically involved in the learning process. For example, a youth learns how to make change more readily with real money than by paper and pencil experiences.

- The focus of the curriculum must be first on the learner and his experiences and then related to the appropriate knowledge, attitudes, and habits to be taught

For each youth the curriculum has to be tailor made to fit his unique needs rather than trying to fit the youth to a ready made curriculum.

- The curriculum must provide for immediate feedback to the youth

The employer's evaluation of the youth's progress on the job, for example, is important to that youth's immediate vocational adjustment in that he can, if necessary, alleviate any weaknesses that are restricting or interfering with his progress on the job.

It is felt the above principles, while applicable to curriculum development for pupils in general, are especially essential in designing a curriculum for the youth who served as subjects for this project.

The progressive work experience program served as the major focal point of the curriculum. The curriculum of the special classes was developed to provide the pupil with the academic skills and knowledges essential for him to realize his vocational potential.

The two major areas of classroom instruction based upon the needs of the youth in the work experience program were: instruction in basic skills (communication nd computation); and vocations. In addition, youth were provided with course-ork in social living, civics, American history, and electives in regular lasses on an individual basis such as art, music, and driver training.

ll youth were enrolled in the English and Practical Math courses. In English he basic communication skills included reading, speaking, writing, and spelling. the mathematics courses those skills that were vocationally necessary were ught. Individual and small group remedial instruction was provided for those uth who were more severely educationally retarded and/or who had specific arning disabilities.

n the Industrial Arts Laboratory the emphasis was on industrial processes and ractices. Mass production articles were designed and produced in the laboratory. The technique of mass production allowed each pupil to understand the rocess from beginning to end and to work as a member of a team. A variety of and and machine operations provided success experiences for each pupil commenurate with his ability. Field trips were taken to industrial plants in the mediate area to investigate first hand how the mass production concepts earned in the classroom were utilized by industry.

n the Homemaking Arts Laboratory the emphasis was on enhancing the vocational otential of girls through fostering improved grooming and acquisition of ocial skills. Actual practice was given in purchasing and preparing quantity ooking, serving paying customers, and determining margin of profit. Course ontent also included marriage and family, mass production of clothing and ood, home decoration and maintenance, budgeting, consumer buying, job opportunities for women, restyling used clothing as well as making garments from w material.

In the vocations classes, trips were taken to pertinent business establishments throughout the community and the state to familiarize the youth with job opportunities. Youth studied various aspects of employment which were compatible with their level of participation in the work experience program. Field trips were also taken to various agencies in the community that had services to offer these youth such as the Illinois Division of Vocational Rehabilitation and the Illinois State Employment Service.

Progressive Work Experience Program

The demands on employees are greater today than ever before. Employers are beset by the threat of automation, war, draft, and the general unrest one would expect in today's world. Consequently, each employer is seeking a college graduate, non-draftable, pillar of middle class traditions. Unfortunately, dropout prone, slow learning youth are very often the opposite of this composite.

The Prevocational Department of the Champaign Schools was conceived to provide vocationally handicapped pupils with services which would enable them to become self-supporting members of society. The most important vocational asset the public school can provide these youth is a high school education. Although not realized by the dropout prone pupil, possession or lack of a high school diploma will weigh heavily on his future vocational success. Also of great importance is the acquisition of positive worker traits, a basic knowledge of the world of work, specific vocational information, management of money and the development of long range vocational plans.

The prevocational program, by design, initiates experiences and knowledge at the time they are of immediate concern to the pupil. For example, the prevocational curriculum provides the pupil with information about employment interviewing, labor laws and worker trait requirements at the time he is seeking his first employment. Budgeting of money, social security, labor unions, payroll deductions, etc., are studied at the time the pupil is first employed in the Community Work Experience program and is likely to become intimately involved in these areas. Likewise, as the youth approaches graduation the content of the prevocational curriculum focuses on those vocational aspects helpful in preparing youth for post school training and employment. The prevocational adjustment counselor assists the classroom teacher in the dissemination of prevocational material by actual participation in the classroom and through his individual counseling interviews with the pupil.

The initial phase of the progressive work experience program is generally made available to the pupil at the junior high school level. At this age level many dropout prone youth are making definite plans to terminate their educational program. It is imperative that corrective procedures be developed to change this perspective.

As each pupil enters the program he is made aware of the scope and impact of services offered by the Illinois Division of Vocational Rehabilitation (IDVR). He is referred to the IDVR counselor by the prevocational counselor and receives a general medical examination. If indications of specific physical abnormalities are noted on the general medical report, special examinations are conducted to identify the severity of the abnormality. Corrective procedures are initiated if warranted. This intensive physical examination at an early age enables the project staff to become aware of any physical limitations of the pupil prior to his inclusion in the progressive work experience program.

The first two phases of the progressive work experience program, In-School Work Experience Laboratory and In-School Cooperative Work Program, consists of closely supervised, semi-sheltered employment in physically familiar surroundings. For most pupils this is their initiation into the world of work. The skills, habits and attitudes cultivated at this time will have a marked effect on their vocational future. Also, educational values learned in relation to their individual vocational objectives will be formulated during this period. Whether or not the youth accepts education as a worthwhile path to employment and seeks a high school education is a crucial decision at this point since legally he can dropout of school.

The third phase of the progressive work experience program, Community Work Experience, is offered to each pupil upon his demonstration of the acquisition of the basic work traits required for employment in a competitive situation. The Community Work Experience phase of the prevocational program allows the pupil to attend school for one-half the school day and to work at a job outside the school setting for one-half the school day. The pupil experiences a work environment that is less closely supervised but more demanding competitively than that which he experienced in the In-School Work phase of the program. At the same time he continues to maintain strong ties with the school through his half-day attendance and the counseling relationship with the prevocational adjustment counselor. The Community Work Experience placement enables the pupil to put into practice the skills, habits and attitudes previously learned and provides the prevocational staff with an opportunity to evaluate the vocational abilities and interests of the pupil.

The prevocational adjustment counselors are the key to the success of the prevocational program and have been selected accordingly. Each prevocational counselor has academic training in industrial and/or vocational education, has advanced training in guidance, counseling, and special education, has had at least four years of successful teaching experience, has had a broad industrial work experience, is extremely insightful and perceptive, and has the maturity essential for working with this type of pupil.

Reality counseling best describes the type of counseling services provided to dropout prone youth by the prevocational counselors. Reality counseling can only be accomplished by a counselor uniquely aware of the individual pupil's strengths and weaknesses, his family and social desires and his feelings toward self and society. In effect, the prevocational counselor must be cognizant of the pupil and his immediate environmental pressures, while at the same time perceive the path to the ultimate goal of the program--vocational rehabilitation. The prevocational counselor must have well developed perceptual abilities in addition to the more common characteristics of an educational counselor.

The team approach utilized in the project enables the attention of various professional disciplines to be focused on pupils experiencing difficulties that are detrimental to their total vocational development. The classroom teacher, psychologist, social worker, prevocational counselor, and IDVR practices and procedures utilized by business and industry. Time cards, piece work rates, mass production, assembly line operation, and quality control become a part of the pupil's daily work experience. The pupils receive no pay for their efforts but do receive school credit and grades. The prevocational counselor, in supervising, observing and evaluating the work of the pupil, consistently adjusts each pupil's work assignment to meet his individual needs and to assure his success with the tasks assigned. The youth remains in the work experience laboratory for at least one year. After one year of successful work experience and after the pupil indicates he has developed adequate social skills and desirable work habits, provisions are made for his advancement into the next stage of the progressive work experience program.

The flow of jobs through the workroom must be orderly and at an even pace. When several school offices are sending jobs to be completed, it can result in days when the number of jobs appears to be insurmountable and days when there is nothing to do. Proper scheduling of work is essential. Regular routine tasks, such as preparing weekly memos to teachers, monthly reports of standing committees, and routine mailings are scheduled on the calendar at appropriate times. Procedures for handling high priority orders are established so as not to upset the orderly flow of work. One time jobs, such as the preparation of teaching units, curriculum guides, school registration bulletins and office forms are used to fill the calendar and insure that something is available for the pupils to do each day. Jobs that can be worked on once and put away to be completed days or even weeks later are used to make certain that each youth has a task to do each day.

Office staff may be reluctant to send some of their routine tasks to the workroom for fear the quality of work may be poor. One job sloppily done or too late to meet deadlines results in embarrassment to all and the loss of confidence and cooperation of the clerical staff. To maintain the high degree of confidence required, the prevocational counselor must always stress quality control in the workroom.

In-School Cooperative Work Program

The second phase, In-School Cooperative Work Program, was designed primarily for ninth and tenth grade pupils. It is planned so that pupils who enter this phase are 15 or 16 years of age and fairly well along the road toward developing appropriate vocational attitudes and habits. In this phase the pupils work for a teacher or a non-academic employee of the school system. Pupils who work in the school offices, lunch rooms, or for custodians during school hours receive a grade and school credit but no pay for their efforts. Pupils employed after school hours are reimbursed for their work at a rate appropriate for their experience and for the responsibility they assume on the job but not exceeding a rate of one dollar an hour.

Each work station is supervised by an adult employee of the school system who gives direction to the pupil and checks to see that the assigned tasks have been accurately carried out. The In-School Cooperative Work supervisor keeps attendance records and submits to the prevocational counselor a monthly evaluation of the pupil's work progress. As the pupil progresses on the job and is able to accept more responsibility, the In-School Cooperative Work supervisor gradually lessens his controls and allows the pupil more freedom of choice in counselor share experiences and knowledge in the search for methods of fostering the pupil's vocational growth.

The prevocational counselor is employed on a twelve month basis to insure close and continued identification of the youth with the school. During the summer months the prevocational counselor helps the youth obtain full-time employment and maintains his counseling relationship with the youth. Each pupil, his parents, and his employer are encouraged to call the prevocational counselor at any time, including nights and weekends, should the need arise.

A prevocational file on each youth located in the prevocational department office is maintained by the prevocational counselor. Included in the prevocational file is all material pertinent to the vocational growth of the youth. Prevocational files include a picture of the pupil, educational history and progress reports, psychological reports, staffing summaries, prevocational counseling summaries (including teacher, family and employer contacts), In-School and Community Work Experience evaluations, vocational test results, copies of Division of Vocational Rehabilitation application, medical and rehabilitation plans, newspaper publicity, correspondence concerning the youth social casework summaries and anecdotal records.

The need for systematically organizing such data becomes apparent when considering the amount of information a prevocational counselor must draw upon to work effectively with individual youth. When the prevocational counselor's case load becomes large, it is impossible to provide effective individual service to pupils unless all pertinent information is readily available to him.

It is important to note that considerable "desk time" is needed by a prevocational counselor to insure the proper recording of his contacts with the youth and his employer. Also important is the availability of adequate secretarial help to assist in the record keeping process.

In-School Work Experience Program

The first two phases of the progressive work experience program - In-School Work Experience Laboratory and In-School Cooperative Work Program - are provided within the school environment. These experiences were considered to be crucial for the subjects in the experimental program of the YOUTH Project. Each phase of the program is designed to cover two years. The youth moves through the various steps of the program on the basis of their years in school, age, maturity, and acquisition of desirable work habits and skills.

In-School Work Experience Laboratory

Each junior high school youth in the experimental group was enrolled in a section or class in the In-School Work Experience Laboratory. The number of pupils in each section was limited to ten or fewer. The laboratory is under the supervision of a prevocational adjustment counselor who supervises the work experiences, provides individual and group counseling, and teaches lessons related to vocations. A variety of jobs, usually of a clerical nature, filing, typing, ditto reproducing, and mimeographing obtained from school offices provides the medium for the work experiences. The prevocational counselor sets the climate in the laboratory, duplicating as accurately as possible the his actions on the job. The prevocational counselor makes routine visits to observe the pupil on the job and to discuss his progress and future plans with the In-School Cooperative Work supervisor. Soon after each visit to the work station, the prevocational counselor holds a conference with the pupil to review his work evaluation reports and discuss problems originating on the job. Pupils remain in this phase of the program until they reach the age of sixteen. They are expected to have a successful work experience of at least one semester duration before being considered for work outside the school setting. Successful work experience is determined by the cooperative evaluation of the pupil's work traits by the In-School Cooperative Work supervisor and prevocational counselor. Initiative, punctuality, dependability, ability to get along with supervisor and fellow workers, and ability to follow directions are some of the traits considered. Inasmuch as the average pupil is in this phase of the program for two years, he has the opportunity to explore several types of work and to have several successful work experiences.

The operation of the in-school program may appear simple at first glance, but the problems affecting its success are many and varied. Total acceptance of the program by all school personnel is essential. In many cases the old established ways of doing jobs around the school must be changed. When asking for these traditional methods to be broken, resistance is often met.

An awareness of the types of jobs performed by the non-academic staff and the capabilities of his pupils is essential for the effective functioning of the prevocational counselor. With these facts in mind, the prevocational counselor's job becomes one of "selling" the services of his pupils to the school staff.

An important consideration to insure the successful operation of the In-School Cooperative Work phase of the progressive work experience program is the selection of supervisory personnel for the work stations. Most persons when first approached express an interest in the program and are willing to cooperate. A few look upon this request to help and to assist as an administrative device to increase their already crowded work loads. The prevocational counselor must be prepared to answer all objections and to be able to assure the supervisors that the pupils placed with them will not be a hindrance to their work or an added burden. Generally only one youth is assigned to a selected work station. to insure that the full energies of the work supervisor is focused on the youth. After a placement has been made, the prevocational counselor must make periodic visits to further establish his willingness to assist the In-School Cooperative Work supervisor in any problems that arise with the youth.

The consultant service provided by the prevocational counselor to the In-School Cooperative Work supervisor is extremely important. As a rule, the non-academic supervisor lacks training in child development and fails to understand the needs of the slow learning or deprived youth. He needs help in determining successful ways of dealing with the pupils. The role of the prevocational counselor, therefore, becomes one of talking over problems, listening to how the In-School Work supervisor handled them, and making suggestions for future actions. Careful attention must be paid to the attitudes and feelings of the In-School Work supervisor and at the first sign of disgust or bias toward a pupil, the prevocational counselor must work with the supervisor and pupil to attempt to clarify the problem and develop a solution. If continued problems arise with one supervisor it is felt to be wise to re-evaluate his true feelings toward the pupils. Occasionally, it is best for all concerned to seek placement with other supervisors.

The proper placement of pupils may present several problems for both the In-School Cooperative Work supervisor and the prevocational counselor. Many work stations that are thought to be acceptable to the prevocational counselor do not meet the approval of the pupil. If the work expected is too hard or too easy for the pupil, he will be unhappy. Often by working in one place or at a particular station the youth is made vulnerable to teasing from his peers, and again he may quit the job. To many male pupils, clerical tasks are unmanly and totally unacceptable while other male pupils derive great satisfaction and self-esteem from running a mimeograph machine. The prevocational counselor must be aware of these problems when making his placements. Careful screening of the pupils and their work stations will help to eliminate possible future difficulties.

After placement has been made, one can look for all the poor work habits of the pupil to appear. If the youth is expected to accept the responsibility to go from one building to another, he will probably be habitually tardy unless slightly more time than is physically needed to get there is allowed. The pupil may occasionally skip his job unless he knows the prevocational counselor is sincerely concerned and is making regular attendance checks. The prevocational counselor and the In-School Cooperative Work supervisor must carefully spell out exact limits with each pupil. These limits must be strictly enforced to prevent the youth from taking advantage of his new freedom and the relaxed format afforded by the work station. Inability to understand or follow directions, sloppy work, and poor relationships with the In-School Cooperative Work supervisor and fellow workers become the joint concern of both the prevocational counselor and the work supervisor. Solutions to these inappropriate work habits, attitudes and traits can be worked out in routine counseling sessions. The most important considerations and possibly the most difficult problems are to help the youth feel he is important to the school, that he is providing a valuable service, and that he is successful in is endeavors. The above are possible through the warm and accepting, yet usinesslike attitude of the prevocational counselor working in a carefully tructured situation.

Community Work Experience Program

he Community Work Experience program was an integral part of the YOUTH Project nd an expansion of an already well developed prevocational program for handiapped youth. It provides the pupil with an opportunity to test his abilities n a real world as opposed to the somewhat unreal or simulated atmosphere of he school. He begins to learn how to function as an adult, in an adult world, without the ever present company of his peers. To some, this transition is threatening and difficult, to others it is challenging and exciting, but for all it is necessary.

Regardless of the ease with which the transition from school to the adult world of work is accomplished, it is desirable that the opportunity for beginning work experiences be incorporated into an adequately staffed and well organized school program. Few persons learn to become accomplished or skilled in all areas of their endeavors without the opportunity to properly orient themselves. When dealing with dropout prone youth who are subject to making mistakes, less perceptive to necessary change and more sensitive about the inadequacies they bring to the job, it is essential that the semi-sheltered environment of the school remain available during the transition period.

Aspects of Program

. Eligibility

A pupil becomes eligible to participate in the Community Work Experience program (phase three) upon reaching the age of 16 and after having successfully completed both phases one and two of the progressive work experience program.

The Community Work Experience program affords opportunity for the pupil to leave the school for a portion of each school day, usually one-half, to work at a job within the community. The pupil accumulates credit toward graduation from high school as well as pay from his employer.

. Job Placement

The prevocational counselor either locates or helps the pupil locate an appropriate job and assists the pupil in the completion of all pre-employment arrangements such as release from school, job application, etc.

. Job Follow-Up

Following placement, the pupil usually requires the continued service of the prevocational counselor both at school and at his place of employment. Counselor-pupil contacts take on different dimensions as the pupil feels more secure in his role as an employee, but the need for such contact rarely diminishes completely. The employer also needs various kinds and amounts of contact with the prevocational counselor. The importance of such contact will be discussed later.

. Job Mobility

lthough the pupil may remain at a specific job for an undetermined length of ime, he is encouraged to consider various factors associated with his job in he light of his future commitment to this area of work. If he discoveres too any unacceptable factors associated with his particular job, he is encouraged investigate other areas of employment. On the other hand, the youth's ility to advance to a new position is evaluated in the same manner. A youth *encouraged to seek advancement, either within* the original place of employ- nt or at another work station depending upon his level of training, job quirements, hours he can work, etc.

. Evaluation

e need for evaluation of the individual pupil's progress is continuous. eded information is gained through contact with both the pupil and his ployer as well as through a monthly progress report filled out by the employer. e progress report serves as a general record of growth as well as a means by ich the employer can record his reactions to those specific personal-social d worker traits felt to be important to the pattern of the pupil's growth ofile. Information thus gained is extremely valuable to the prevocational unselor as he works with the pupil.

. Post-School Options

Upon completion of all required course work and after the accumulation of sufficient high school credits, the pupil graduates from high school. Upon graduation he can exercise one of several options regarding his vocational future. He may elect to remain on his job on a full-time basis, he may secure other employment, or, if qualified, he may pursue specific job training either through an on-the-job training arrangement or by attending an appropriate trade school through the auspices of DVR.

Justification of the Community Work Experience Program

As a pupil enters the Community Work Experience program he should have gained considerable insight concerning his abilities to work effectively. To insure that the pupil experiences the full impact of his new status as a work-study participant, a number of pre-job conditioning steps are initiated. He participates in the job selection process, he generally has to compete with at least one other pupil in order to secure the job, and he has to agree to observe the various conditions surrounding his release from school to participate in the Community Work Experience program. Significant here is the fact that he has to invest something of himself, some energy in securing the job. This is important because, hopefully, he will not give up easily or fail to try to succeed on the job when he has had to expend considerable effort to obtain it. Contrast this with a situation where he has nothing invested, where he is merely assigned to a job, possibly with an artificial interview staged, supposedly, for his benefit. He can quit such a job blaming everyone else but himself for his difficulties.

It is expected that the pupil will experience some difficulties adjusting to the job situation. It is one of his first attempts to "break into" the adult world. No longer does he have the security of being surrounded by his peers. ertain modes of behavior, patterns of speech, and style of dress are no longer cceptable. He may find that they are quite inappropriate and unless he has ome appropriate substitute or possibly certain outstanding strengths such as ood work habits, a warm and friendly personality, etc., he may be unaccepted i his new environment.

en recognition is given to the adjustment problems pupils have in making the ansition into the world of work, it is possible to build in controlling ctors that will aid the pupil during his time of need. The fact that the pil has the sheltering environment of the school to which he can return for sistance is important. Hopefully, the school, with its staff of adults, many f whom have been trying to prepare him for the difficulties he is now experiencing, suddenly becomes a more desirable place to him. The pupil must be able o approach someone who understands his problem. To insure that this is possible, t is of extreme importance that the prevocational counselor be available for onsultation at all times. It is equally important that the prevocational ounselor is perceived by the pupil as a source of information, an interested elpful person, and a willing and fair-minded adult rather than as an aggressive, isciplining, disinterested and domineering staff member. Pupils who have not een able to establish satisfactory relationships with the school staff or with dults in general are extremely sensitive about the approachability of adults. his factor cannot be over-emphasized when dealing with dropout prone pupils, articularly when the pupil is at the stage of leaving the security of school and his peers for the unsure and perhaps misunderstanding adult world of work. In spite of the willingness of the prevocational counselor to support the youth who fails on the job, the focus of prevocational counseling is always on the future and on prevention of the establishment of a dependency relationship.

Following job placement, and as the pupil-employer relationship is stabilizing, the prevocational counselor has an opportunity to serve as a catalyst in the stabilizing process. Frequent visitations to the employer to discuss the status of the youth, observe the youth on the job and give or relay pertinent information serve to promote better understandings by the parties involved. Such visitations diminish in number as the employer-employee relationship matures. The need for contact between pupil-counselor and employer-counselor rarely disappears, but may take on more the dimensions of friendly visitation rather than need-related discussion. It is interesting to note that many employers desire such continued contact from the prevocational counselor in order to "brag" about the progress the youth is making on the job.

It is anticipated that the youth will have an opportunity to sample several different work situations while participating in the Community Work Experience program. As he becomes a more proficient worker, the youth has a need to participate in an expanded environment. He needs to experience the feeling of the progress and growth of which he is capable. The contribution of the prevocational counselor during the transitional period must again be emphasized. Some youth fail to recognize the need for a job change. They may have become quite comfortable and satisfied as a result of the success experienced on their first job and display a reluctance to leave. Others show no regard for caution and leap at a promise of more money without considering possible less desirable features about the job in question. The prevocational counselor must be acutely aware of the individual youth's capacity for growth. He must be able to correctly assess the various aspects of an employment situation and weigh the possible various advantages and disadvantages to the youth. The final decision regarding a job change should be the decision of the youth but arrived at in onsultation with the prevocational counselor. In no instance should a job hange be allowed without a thorough joint exploration of the proposed change y the prevocational counselor and the youth.

e need for continuous evaluation of the individual youth's progress becomes ident when one considers the various facets of the prevocational counselor's le. He must always be aware of the many significant cues that point to change n the youth's growth pattern. He must convey his interest in the youth's job ituation and be able to discuss any of the many positive or negative concerns he youth wishes to discuss.

he youth who participates in the Community Work Experience program finds himelf approaching graduation from high school with much the same anxiety as most outh. Although he usually has several desirable options available to him, here is a need for decision making that many college bound youth can delay for t least another year. This decision involves the choice of whether to remain t his present job, obtain other employment, or train for a specific job quiring additional skills. Here again the need for a vast amount of information regarding the individual's strengths and weaknesses as well as knowledge f current and future trends in families of jobs must be available to the prevoational counselor and the pupil so that the best possible decision can be made.

Post School Planning

The planning of post school training or vocational placement is recognized by the project staff as being worthy of long and careful deliberation. Planning activities should include careful consideration of the results of various measures of abilities. Some of the instruments used are the Purdue Pegboard and Minnesota Hand-Tool Dexterity Tests and the WISC Performance Scale. The Kuder Vocational Preference Scale can be used to identify gross areas of vocational interest. The psychologist from the Illinois Division of Vocational Rehabilitation administers vocational tests to all youth during their senior year which provides a measure of the youth's vocational competencies in specific areas.

Less definitive, but of equal importance in the post school vocational planning process, is an evaluation of the youth's work skills. The team composed of the prevocational coordinator, the IDVR counselor, prevocational counselor, psychologist and social worker share a wealth of information gleaned from the youth's previous school and work experiences.

Considered in the total planning process is the youth's academic record, attendance record, educational counseling summaries, in-school work experience evaluation, community work experience evaluation, prevocational counseling evaluation, and the expressed vocational interest of the youth. Too frequently the vocational future of a youth is determined by the immediate financial and social plans of the youth. Large car payments or early marriage many times thwart the best laid plans for post school vocational training.

During the youth's last year in school he makes a tentative vocational choice based on the real or assumed knowledge he has gained. He is encouraged to learn all he can about the particular vocational choice through guidance manuals, films, interviews with persons presently employed in the vocational area, field trips to industry or business, actual employment in a closely related job, and eventually a trip to a trade school having training facilities in this area. Through this concentrated study he develops a more objective and insightful criteria for retaining or rejecting his tentative vocational choice. If he rejects it, the DVR counselor and prevocational counselor assist him to survey other vocations that may be compatible with his abilities and desires. The same learning process is then followed for his new vocational choice.

Inherent in ideal planning is the inclusion of the youth's parents throughout the entire process. Early in the planning process individual and group meetings were held with the youth, parents, prevocational staff, and DVR counselor. Although meetings designed to inform the parents of the comprehensive program offered by the school and DVR were held throughout the youth's enrollment, the meetings during the youth's last year of attendance were generally better attended and most fruitful. The full impact of the youth's termination from his long association with the school is now realized by the parents. In many instances they freely relate their apprehension associated with this school termination coupled with their lack of knowledge concerning the transition from pupil to employee. In these meetings parents have been able to develop a better understanding of their youth in ways of helping them in the vocational area. The parent is kept informed of and involved in all aspects of planning. Each year parents are encouraged to attend a meeting where a DVR psychologist and representatives of trade schools discuss trade school training opportunities. Parents are encouraged to accompany their child on visitations to trade schools.

Upon final selection of a vocation, the major responsibility for post school training and/or placement rests with the DVR counselor and with the prevocational counselor working with him. If the vocational objective of the youth entails trade school training, the DVR counselor completes the necessary arrangements allowing the youth to make a smooth transition from school to trade school. If his vocational objective does not require his attending a trade school, the DVR counselor and prevocational counselor assist him in obtaining employment compatible with his ability and vocational choice.

Initially some problems were encountered by the project staff due to the inability of some youth to take advantage of post school trade training opportunities because of family financial responsibilities. In most cases the families in question were receiving aid through the Champaign County Department of Public Aid. Conferences between the project staff and the County Department of Public Aid resulted in this agency accepting the financial responsibility for the dependent family members while the youth received trade training through the DVR.

Trade school attendance and initial job placement does not release the prevocational staff from its commitment to the youth. Youth who have graduated to productive citizenry provide a valuable resource for program evaluation and curriculum change. Each youth attending trade school is required to write to the DVR counselor at least once a month. The general rule is for the prevocational staff of the Champaign Schools and the DVR counselor to receive frequent letters from former youth receiving trade training. Many contact project staff during their vacation periods.

Former youth on jobs within the local community are followed up at least twice a year by the project staff. Incidental contact is usually made on a much more frequent basis.

Chapter V

METHOD

Overall Approach

The experimental design of this study involves pre and post testing of youth placed either in an experimental or in a control group where the experimental variable is a specially designed program involving a vocationally oriented prevocational curriculum and services. Briefly, slow learners (IQ 75-90) ranging in age from 13 to 21 who were considered to be school dropout, delinquency, and unemployment prone were referred as possible candidates for the project. Following referral, the subjects were administered a battery of tests, and if eligible for the project were then matched and randomly placed in either a prevocational treatment program (experimental subjects) or allowed to continue in the regular school program (control subjects). At the end of the treatment phase of the project, all available subjects were re-administered the battery of tests and the gains made by both sets of subjects were subjected to statistical analysis. Only those findings that could occur by chance less than five times in one-hundred were considered to be significant.

Population and Sample

General Description of Population

At the start of the project in 1962, the Champaign Community Unit IV Schools had an enrollment of approximately 10,000 pupils. Of these, 2100 were located in the three junior high schools and 1650 in the senior high school. All pupils in the school system who met the objective selection criteria were considered to be eligible for the project.

Generalization of the findings can be made to appropriate sub populations of communities similar to Champaign, since the total school population was considered in the study and appropriate statistical procedures were used to evaluate the project.

Identification Procedures

Project staff conducted group meetings with guidance personnel and other school staff members to interpret the characteristics of the subjects for whom the project was designed in order for them to make appropriate referrals.

The following criteria derived from factors known to be associated with early school leaving, delinquency, and unemployment were used to screen and identify the subjects:

- School Marks. Youth who had predominately failing grades were referred for the project.

- School Achievement. Any youth achieving two years or more below grade level in reading and/or arithmetic was referred for screening.

- Social and Emotional Adjustment. Youth who manifested poor social and emotional adjustment were considered for further evaluation.

- Socio-Economic Status (SES). Ratings were made of the socio-economic status of potential subjects by applying the Warners Scale (1949) to the father's occupation, area of residence and condition of housing. Final socio-economic status was determined by multiplying the father's occupation score by four (4) and the housing score by three(3) and summing the results. Scores of 35 to 49* were required for admission to the project with the exception that during the second year of the project several youth who, according to the rating scale, attained slightly higher scores, were admitted on the basis of a social worker's evaluation of the home which indicated that the dwelling approximated that of subjects in the project. The exceptions occurred because straight lines (which ignored minor local variances) were used to establish the original boundry lines for the project.

- Intelligence. Information in the cumulative folders was used to identify youth who scored in the slow learning range on group intelligence tests. These subjects were then administered the Stanford-Binet Intelligence Scale, Form L-M. Subjects eligible for final inclusion in the study had to attain a Stanford-Binet intelligence quotient (IQ) between 75 and 90.

Description of the Final Sample

A total of 537 pupils, referred through the screening procedures as potential subjects, were administered the Stanford-Binet Intelligence Scale, Form L-M, the results of which was the final determinant of eligibility. Of these potential subjects, 286 or 53.3%, attained IQ's between 75-90; 215, or 40%, attained IQ's above 90; 36, or 6.7%, attained IQ's below 75. Thus, only 286 pupils met the final criterion for eligibility (IQ 75-90). Not all of these youth, however, were included as possible subjects due to the following circumstances occuring prior to placement in the project:

	N	%
• Dropped out of school	21	7.3
• Moved	17	5.9
• Social worker investigation indicated homes had SES above criterion	11	3.8
• Placed in juvenile institution	1	1.6
• Pregnancy	1	1.6
	51	20.2

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* The higher the score the lower the socio-economic status

All youth who met the criteria for eligibility and were available as subjects at the time the program was to be initiated, constituted the final population. From this sample population youth were matched for placement in either the experimental or control group according to the following criteria:

- Sex
- Race
- I.Q. (within 8 points)
- SES (within 5 points)
- C.A. (within 10 months - usually less)

After pairs of subjects had been established, one member of the pair was selected randomly for inclusion in the experimental group and the other was assigned to the control group.

Following selection for placement in the experimental group, parents and youth were contacted by prevocational counselors who interpreted the purpose of the project. Any experimental youth who refused to enter the project was excluded from placement in either the experimental or control group.

Forty-four eligible candidates refused to cooperate (either refused placement in the experimental program or refused to take additional tests) and were eliminated from the project. In addition, 9 were not included because they could not be matched. Subjects originally assigned to the control group who refused to cooperate in the pre testing were also eliminated from the project.

After all contingencies had been accounted for, a total of 182 subjects (91 experimental and 91 control) were matched and placed in the project during the Fall of the 1962-1963 school year and 1963-1964 school year. Additional youth were admitted to the project in the Fall of the 1964-1965 school year but data on these subjects were not included in the statistical analysis because the treatment period was not sufficient to adequately test the hypotheses. (See foreword for an explanation of the early termination of this project.)

Statistical evaluation of possible differences between the experimental and control groups on the criterion variables reported in Table I indicates that the groups did not differ significantly on the basis of socio-economic status, chronological age, or Stanford-Binet IQ.

The distribution of subjects by race and sex is indicated in Table II. Since a matched pair design was used, controlling for these variables, both groups are, of course, comparable in these respects.

Table I

Characteristics of Subjects Selected For The Study

	Experimental	Control
Mean CA of subjects entering project in 1962	15-7	15-7
Mean CA of subjects entering project in 1963	14-3	14-5
Total Mean CA[a]	15-0	15-1
Mean I.Q.[b]	83.2	83.7
Mean S.E.S.[c]	40.27	39.38

No significant difference: a ($t_1 = -.12$) b ($t_2 = .57$) c ($t_3 = 1.01$)

Table II

Distribution of Initial Subjects By Race and Sex

	Male	Female
Caucasian	32	18
Negro	23	18

Description of Instruments

The instruments administered on a pre and post basis to each subject in the project were as follows:

- The 1960 Stanford-Binet Intelligence Scale, Form L-M, was administered to determine intellectual eligibility and to facilitate identification of strengths and weaknesses.
- The Stanford Achievement Tests provided information concerning academic achievement in Paragraph Meaning, Word Meaning, Spelling, Arithmetic Reasoning, and Arithmetic Computation.

- Four tests of eye-hand coordination were administered: The Digit Symbol Subtest of the Wechsler-Bellevue Scale, Form II, the Purdue Pegboard Test, the Minnesota Hand-Tool Dexterity Test, and the Minnesota Clerical Test was used to assess speed and accuracy in performing tasks relating to clerical work.

- A measure of perceived peer acceptance was obtained using 50 items selected from the California Test of Personality. After appropriate modifications and changes to guard against response set, these 50 items were arranged to provide a perceived peer relationship scale. (See appendix)

- A measure of the subjects perception of appropriateness and inappropriateness of tasks was used to assess realism of goals.

- The Vineland Social Maturity Scale provided scores that were related to "Social Age" and "Social Maturity".

- The Taylor Manifest Anxiety Scale provided one measure of behavior related to emotional adjustment.

- The California Psychological Inventory, a 480 statement instrument devised to be answered either "like me" or "not like me", yielded a total of eighteen scores for each subject which theoretically measure the following characteristics: dominance, capacity for status, sociability, social presence, self-acceptance, sense of well-being, responsibility, socialization, self-control, tolerance, good impression, commonality, achievement via conformance, achievement via independence, intellectual efficiency, psychological mindedness, flexibility, and masculinity-feminity.

Qualitative clinical data were obtained from each subject through the use of a sentence completion test, guidance questionnaire, and structured interview. All data were utilized in preparing each case study. (See appendix for instruments.)

A separate interview form devised by the social workers and prevocational counselors was used when interviewing those youth who had either graduated or dropped out of school.

Method of Analysis of Data

In an attempt to present a description of slow learners from low SES homes who are school dropout, delinquency, and unemployment prone, the analysis of the data obtained from this study are presented in two ways: (1) statistical analysis of the data, and (2) incorporation of the data in a discussion by means of a case study approach.

Appropriate statistical techniques were used to analyze the data including analysis of Variance, Chi Square, and t tests. Basic references for the procedures are Lindquist (1953), and Walker and Lev (1953). Statistical significance was set at the .05 level of confidence.

Chapter VI

RESULTS AND DISCUSSION

In a study where significant numbers of subjects are lost to the project for one reason or the other, it behooves the researchers to ascertain whether or not the obtained results could or should be attributed to factors other than those considered in the experimental treatment. After a thorough review, it is believed that the overall findings of this study were not affected by biasing factors associated with membership in either the experimental or the control group. Data to support this belief are herewith presented. Following the presentation of this special information, the chapter is organized into the following five sections:

- School Retention and Attendance
- Vocational Adjustment
- Social and Emotional Adjustment
- Achievement
- Additional Pertinent Findings

Follow up data was impossible to obtain from some of the subjects for any of a variety of reasons: incarceration, service in the Armed Forces, move without leaving a forwarding address, refusal to cooperate in post testing. Since some of the pupils moved to other communities and thus were unavailable for follow-up studies, consideration was given as to whether or not more pupils dropped out of one group than the other due to mobility.

The findings indicate that 9 youth moved from the experimental group and 7 youth moved from the control group. From these findings, it is apparent that the movement of youth to other communities was not related to placement in either the experimental or control group.

In evaluating the study, it became necessary to ascertain whether or not there was a difference between "dropping out" or "staying in school" that was associated with IQ. Data on the IQ's of both groups are presented in Table III.

Table III

Mean IQ's of Total Groups, Moves, Dropouts

	Experimental	Control	t
Total Group (N = 182)	83.2	83.7	-.77
Those Who Moved (N = 16)	83.3	83.7	-.19
Those Who Dropped Out (N = 43)	82.6	83.3	-.46
No significant difference			

The mean IQ of the youth in the total experimental group (N = 91 matched pairs) was 83.2 and in the total control group was 83.7. When these scores were analyzed statistically there was no significant difference between the IQ's of the subjects in the experimental and control groups. Experimental youth who moved from the community had a mean IQ of 83.3, while control youth who moved from the community had a mean IQ of 83.7. Experimental youth who dropped out of school had a mean IQ of 82.6, while control youth who dropped out of school had a mean IQ of 83.3. It can be seen that there were no significant differences between subjects in the experimental and control groups that could be related to either a differential moving from the community or dropping out of school that was associated with intelligence. Although this finding might appear to be somewhat contradictory to the findings of other studies, Bowman and Matthews, 1960; Jacobs, 1954; Allen, 1956; Ott, 1959; Drescher, 1954; and Snepp, 1956, which indicate that youth who dropout of school tend to have lower ability, it should be remembered that the youth in this study were initially selected because of limited intellectual ability, hence are more homogeneous in this regard. Thus, dropping out of school in this study seemed to be associated with factors other than limited intellectual ability.

A statistical analysis, Table IV, indicated that there was no difference between the socio-economic status of the total initial group, the "dropout" group, or of the "move" group. There was a difference ($p < .05$), however, between the socio-economic status of the youth who dropped from the experimental group as compared with the socio-economic status of the youth who dropped from the control group. Thus, it would appear that the subjects who dropped from the experimental group tended to come from homes classified as being of slightly lower socio-economic status than did those who dropped from the control group. It must be remembered that all subjects were from low SES levels, although, even then, there was a range within the group.

Table IV

Mean Socio-Economic Status of Total Groups, Moves and Dropouts

	Experimental	Control	t
Total Group	40.3	40.0	.38
Those Who Moved	42.1	40.6	.667[a]
Those Who Dropped Out	42.5	38.5	2.55 *

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[a] No significant difference
*Significant at .05 level

When the sex of the subjects was considered, it can be seen from Table V that there was a differential dropping out in that more males dropped out of the control group (23) than dropped out of the experimental group (6). These findings were significant beyond the .05 level of confidence. For females, on the other hand, there was no differential rate of dropout from the two groups (N = 7 for both groups). Thus, it would appear that the experimental program had a considerably stronger holding power for males than for females. This finding with respect to the control group is consistent with those of Allen, 1956; Jacobs, 1954; Sheldon, 1958; and Gregg 1950.

Table V

Distribution and Percentage of Dropouts From Initial Sample

	Initial Pairs		Experimental				Control			
	Male	Female	Male		Female		Male		Female	
			N	%	N	%	N	%	N	%
Caucasian	32	18	4	12.5	3	16.7	16	50.0	4	22.2
Negro	23	18	2	8.7	4	22.2	7	33.3	3	16.7
Significant beyond the .05 level ($\chi^2 = 16.33$)										

Evaluation of the data contained in Table V also suggests that there was no difference in the holding power between Caucasian and Negro males in that about four times as many males of each race dropped out of the control as compared with the experimental group. This finding is contrary to that of Jacobs, 1954; Sheldon, 1958; Ott, 1959, Gregg, 1950; who reported that the great majority of the school dropouts come from minority groups.

In summary, there was no difference between the total initial group and the "moves" and "dropouts" in terms of IQ, but there was a difference when sex and socio-economic status were considered. More control males dropped out of school than did experimental males. The experimental dropouts tended to come from the lower SES level. Since differences among the independent varible appeared to be either minor or associated as expected with the experimental varible it was assumed that subsequent results could be accepted with only minimal reservation.

In view of the foregoing it was decided to simply delete all data for a pair when the data for one member of the pair was unavailable. After all necessary deletions of matched pairs had been made, the final subject population was composed of 61 matched pairs of whom 29 were Caucasian (21 males and 8 females) and 32 were Negro (20 male and 12 females). The mean IQ of the final experimental group was 83.9 and of the control group was 83.44. The difference between these two groups was not statistically significant. These data are presented in Table VI.

Table VI

Characteristics of Final Subject Population

	I.Q.	Caucasian		Negro	
		Male	Female	Male	Female
Experimental	83.9	21	8	20	12
Control	83.44	21	8	20	12

No significant difference (t = .667)

Through vigorous follow-up activity it was possible to obtain follow-up data on 5 of the 13 dropouts in the experimental group and 14 of the 30 dropouts from the control group. The distribution of dropouts for whom follow-up test data were obtained is indicated in Table VII. Approximately the same proportion of dropouts from each group was available for follow-up testing and interviewing with the exception of Caucasian males. Of the 4 Caucasian male dropouts in the experimental group, researchers were unable to obtain any follow-up data. On the other hand, of the 16 Caucasian male dropouts in the control group, 7 returned for follow-up testing and interviewing.

Table VII

Distribution of Dropouts Who Returned for Post Testing and Included in Statistical Analyses

	Experimental				Control			
	Male		Female		Male		Female	
	N	%[a]	N	%[a]	N	%[a]	N	%[a]
Caucasian	0	0	1	33	7	44	1	25
Negro	1	50	3	75	4	57	2	66

a = % of total dropouts

It should be noted that the data on the dropouts included in the study were obtained from those former youth (N = 19) who had remained in the community and who agreed to be tested in return for ten dollars compensation for one day's testing time.

During the course of the project 5 of the female experimental subjects became pregnant and interrupted their schooling. Four of these 5 continued their education after the birth of the child and consequently are not included as dropouts in Table VII. Two of the female control subjects are known to have had a child after dropping out of school but neither of these subjects continued their education following the birth of the child.

School Retention and Attendance

As has been described in previous sections, following selection for the study, the subjects were placed in one of two programs (experimental or control) for a period of two to three years. During this treatment program, as might be expected among pupils with the problems manifested by these youth, many of the subjects were lost to the project. (See Table V). For example, of the original experimental group, 13 of the youth dropped out of school and did not re-enter. In comparison, 30 of the subjects dropped out of the control group. This difference is significant at the .01 level. Thus, 2.3 times as many youth dropped out of the control group as dropped out of the experimental group. Stated in another way, 33 per cent of the control subjects dropped out of school while only 14 per cent of the experimental subjects dropped out of school. When males only are considered, 3.8 times as many control subjects dropped out of school as compared to experimental subjects. Forty-two per cent of the control males dropped out of school while only 11 per cent of the experimental males dropped out of school. In contrast to the males, the number of females dropping out of school was essentially the same for each group. Bowman and Matthews (1960) who also conducted a study of dropouts found more boys dropping out of school than girls but the difference was not statistically significant. The findings of this study, however, are in agreement with those of Allen (1956), Jacobs (1954), Sheldon (1958), and Gregg (1950). This finding strongly supports the hypothesis that the experimental program would have greater holding power than the regular school program.

It was believed that if the program resulted in increased school holding power, then the experimental subjects would be absent fewer days than the control subjects. The rationale for this belief is that youth who are interested and successful in school will make every effort to be in school while, conversely, youth who are unhappy and unsuccessful in school will withdraw from school whenever the slightest excuse presents itself. From Table VIII it can be seen that there was no difference between the two groups at the beginning of the project. That is, the subjects in the experimental group did not differ significantly from the subjects in the control group with regard to previous school absences during the year immediately preceding the start of the project.

From the data obtained at the completion of the project (see Table IX), it was apparent that the project had a beneficial effect on the experimental group in that subjects from the experimental group were absent significantly fewer times than were subjects of the control group. In fact, 14 of the control group were absent 50 or more days during their last year in the project, whereas only 4 of the experimental group was absent 50 or more days. When one considers absences of 9 days or less for the school year, it can be noted that the experimental group had 22 youth who were absent 9 days or less, whereas the control group had 16 youth who were absent 9 days or less. This finding seemed to be consistent with the findings of other researchers. Bowman and Matthews (1960) for example, found that the absence rate of the dropout increased as he went up the educational ladder. Their findings are similar to those of McCreary and Kitch (1953), Gregg (1950), Drescher (1954), and Snepp (1956). Thus, the intervention provided the experimental subjects seems to have changed beneficially the pattern of school attendance for youth who were dropout prone.

Table VIII

Number of Days Absent During the Year
Before Entrance Into Project

	DAYS ABSENT				
	0-9	10-19	20-29	30+	Total
Experimental	21	22	12	4	59 a
Control	27	13	9	10	59 a
Total	48	35	21	14	118

No significant difference ($\chi^2 = 5.82$)

a Two pupils moved into the school and were not present an entire year

Table IX

Number of Days Absent During Last
Year of Project

	DAYS ABSENT						
	0-9	10-19	20-29	30-39	40-49	50+	Total
Experimental	22	13	12	4	6	4	61
Control	16	16	8	3	3	14	61
Total	38	29	20	7	9	18	122

Significant at .05 level ($\chi^2 = 14.107$)

From an examination of the table, one might draw the conclusion that as many as 14 control youth, those who had missed 50 or more days out of a possible 178 school days, as compared with only 4 experimental subjects, were on the verge of dropping out shortly after the conclusion of the project and before the next school year. If such did occur, then it would provide strong additional support for the success of the study.

In summary, the findings in regard to school retention and attendance are:

- The experimental program had a greater holding power than the conventional program in that:
    - More control subjects dropped out of school than did experimental subjects
    - The experimental subjects were absent significantly fewer days than the control subjects

Vocational Adjustment

It was hypothesized that youth in the experimental program would attain qualitatively better and more remunerative positions than would youth in the control group. In order to determine the qualitative level of the positions, a rating scale based on the Dictionary of Occupational Titles, but revised for specific use with this project, was used to classify all the vocational attainments of the subjects. Briefly, the scale consists of the following categories:

- Incidental
- Unskilled
- Service
- Semi-skilled
- Skilled
- Managerial
- Pre-professional

The above scale was used by the project staff to rate the jobs the youth reported that they had held prior to entering the project and the jobs the youth reported that they had held following entry into the project. The highest position attained was used to determine the youth's rating. It was necessary to use self-report rather than make frequent contacts with control subjects, their parents, and employers during the course of the project because it was soon learned in the initial stages of the project that the continuous type of follow-up of subjects was seemingly causing the control dropouts to re-enter school and might be contributing to the holding power of the school for those who were on the verge of dropping out.

Since project staff recognized that a variable (accuracy of self-report) was being introduced that might confound findings the self-reports of controls were compared with the self-reports of experimental subjects.

An evaluation of the experimental subjects self-report data with the data found in the subject's prevocational file indicates that the correlation is .82. This correlation indicates that there is a significant relationship between self-report data from the subject and data obtained from employers. In view of this finding the data from the self-report forms is considered to accurately reflect actual behavior.

Table X presents data regarding highest level of job held by subjects prior to entry into the project. From this table it can be seen that, with one exception the highest level job attained by any youth prior to entering the project was a job classified at the unskilled level. Many of the youth, of course, reported that they had never worked at all. An evaluation of this data indicates that there are no statistically significant initial differences between the experimental and control groups in terms of highest level of job held prior to entrance in the project.

Table X

Highest Level Job Held By Subjects
Prior to Entrance in Project

	None	Incidental	Unskilled	Service	Semi-Skilled
Experimental	35	4	2	0	0
Control	36	11	0	0	1

No significant difference ($\chi^2 = 1.35$)

Table XI shows the number of part-time jobs reported held by the subjects prior to entry into the project.

Table XI

Number of Part-time Jobs Held By
Subjects Prior to Entrance in Project

	0	1	2
Experimental	36	3	1
Control	46	1	0

No significant difference ($\chi^2 = 2.6$)
Twenty-one of the experimental subjects and fourteen of the control subjects did not provide this information.

Statistical analysis of these results indicate that there was no significant difference between the groups at the beginning of the project in terms of the number of jobs held.

Table XII presents data regarding the highest level part-time job held by subjects during the project period.

Table XII

Highest Level Part-time Job Held
By Subjects During Project

	None	Incidental	Unskilled	Service	and	Semi-Skilled
Experimental	16	6	11	(6)	8	(2)
Control	17	10	17	(1)	1	(1)

No significant difference ($\chi^2 = 5.64$)
Twenty of the experimental subjects and fifteen of the control subjects did not provide this information.

Due to the small number of subjects that attained semi-skilled positions, the semi-skilled and skilled positions were combined in order to make an appropriate statistical test. Statistical analysis of possible differences between the two groups in terms of highest level job attained during the project indicates that there was no significant difference between the two groups on this variable. Although there was no significant difference between these two groups according to the statistical results, one wonders if the slight trend might eventually prove to be significant if the study were continued until all youth had had an opportunity to complete their schooling and obtain employment.

Support for the belief that the experimental program had a beneficial effect on the vocational adjustment of the youth can be obtained by studying the differences between the two groups as reported in Table XIII. This table presents data on the number of part-time jobs held during the project as reported by the subject.

Table XIII

Number of Part-time Jobs Held During Project

	0	1	2	3	4
Experimental	29	9	1	2	0
Control	36	3	5	1	2

Significant at the .05 level ($\chi^2 = 6.84$)
Twenty experimental and fourteen control subjects did not provide this information.

In this analysis, youth who held only one position were compared with those who held two or more positions during the project. An evaluation of these findings indicates that the experimental subjects held significantly fewer jobs than did the controls. The possibility exists that the experimental subjects were more selective in terms of matching job requirements and potential with personal attributes when deciding whether or not to apply for or to accept a particular position. Further, once they had decided to apply for a job in a particular area, they were able to obtain the job, hold the job, and develop their knowledge and skills in one position rather than to hop from one job to another. The experimental subjects had the advantage of intensive and extensive vocational counseling by the prevocational counselor employed by the school and by the counselor of the Illinois Division of Vocational Rehabilitation. Consequently, the experimental subjects were better able to assess their vocational assets and liabilities in the selection of a job. Furthermore, this intensive counseling prior to and during his employment seemed to enable the youth to understand and ameliorate problems interfering with good vocational adjustment.

In an attempt to gain further information regarding the youth's vocational history, full-time jobs held by experimental and control subjects were classified according to the previously described scale. Results of this classification are reported in Table XIV. Since only relatively few of the youth had reached graduation age and thus were eligible for full-time jobs, these findings need to be interpreted with caution. It can be seen that the median job, based only on N = 7, held by the experimental group was at the service level whereas the median job held by the control group was at the unskilled level. Although there is no significant difference between the two groups at this time, the data cause one to wonder if in the future, evidence might become available to indicate that the experimental subjects do eventually attain higher level jobs. Support for this contention comes from the fact that most of the control youth seem to have attained jobs only at the unskilled level (N = 11). Also, many of the control subjects in this category were school dropouts and thus it can be anticipated they will probably remain at or very close to this vocational level in the future. Further, this table does not contain information on those experimental subjects who are continuing their education in trade school and who upon completion of their post school training will attain semi-skilled or skilled jobs. These findings suggest that a follow-up study after all the subjects have had a chance to complete trade school and obtain a job, might provide extremely interesting and significant findings.

Table XIV

Highest Level Full-Time Job Reportedly Held During Project

	None	Incidental	Unskilled	Service	Semi-Skilled
Experimental	34	1	2	2	2
Control	32	2	11	1	1

No significant difference ($x^2 = 2.0$)
Twency experimental and fourteen control subjects did not provide this information.
Incidental and Unskilled columns were collapsed to provide statistical evaluation as were Service and Semi-Skilled

It was hypothesized that the subjects who had been in the experimental phase of the project would continue their training in trade schools or other appropriate training institutions to a greater extent than the subjects in the control group. Inspection of the table clearly indicates that the experimental subjects were superior to the control subjects in this respect. One control subject possessing outstanding athletic ability attended a junior college for one semester and had to dropout because of failure, while 8 experimental subjects attended a trade school to receive further vocational training to enhance their job opportunities. These data are reported in Table XV.

Table XV

Post School Vocational Training Received
By Subjects Who Graduated or Dropped Out of School

	No Information	No Positions	Position unskilled, could benefit from training	On-the-Job training leading to semi-skilled or skilled employment	Training program trade school, etc.
Experimental	1	0	4	8	8
Control	2	7	7	2	1 a

a This subject had an athletic scholarship to a junior college but did not return for the second semester.

It can be noted from this table that 8 experimental subjects entered an apprenticeship program provided by the employer which would lead to a semi-skilled or skilled trade while only 2 control subjects were employed under similar conditions.

It was hypothesized that the experimental subjects would develop improved self-concepts during the course of the study. A more realistic educational expectancy as related to vocational requirements was anticipated to reflect this improved self-concept. At the completion of the project the subjects were asked to delineate their vocational choices. Vocations were rated in terms of the level of educational attainment necessary for entry into a chosen vocation. Results are shown in Table XVI. As can be noted, 24 experimental subjects chose vocational objectives requiring trade school training, while only 17 control subjects selected this level of vocational objective. Three experimental subjects indicated a vocational objective requiring college training as a prerequisite, while 8 control subjects selected similar vocational objectives. In addition, 2 control subjects, as contrasted with no experimental subjects, selected vocational objectives requiring a graduate level college education. Six individuals from both the experimental and control group selected vocational objectives requiring no additional training beyond high school. One control subject, as contrasted with no experimental subjects selected a vocational objective requiring only a junior high school education.

Table XVI

Academic Training Needed to Attain Vocational Goal

	Jr. High	High School	Trade	College	Graduate		$\overline{X}$	s^2
(Rating)	1	2	3	4	M.A. 5	Ph.D. 6		
Experimental	0	6	24	3	0	0	2.91a	.273**
Control	1	6	17	8	1	1	3.15a	.917**

a No significant difference (t = 1.28)
** Significant beyond .01 level (F = 3.36)

Since it was hypothesized that the experimental subjects would select more realistic vocational goals than did the control subjects, it was expected that they would choose for their vocation jobs that would require the completion of a high school or trade school. When the level of education required for their vocational choice was rated on a scale from one to six (see Table XVI), the experimental subjects attained a mean score of 2.91, which indicates that the subjects were selecting jobs that would require the completion of high school and some trade school training. The control subjects, on the other hand, attained a mean score, with regard to vocational choice, of 3.15, which indicates they selected vocational objectives requiring trade school and some college education. A comparison of the differences between the two was not statistically significant. Thus, there was no difference between the two groups in-so-far as mean level of educational training required to attain the vocational goal of their choice. It should be noted, however, that when one is choosing a goal, it is just as inappropriate to establish a goal that is too high as one that is too low. Consequently, it was decided to determine whether or not there was any difference in terms of the variability of choices. It was considered desirable to determine whether or not the control subjects sought positions that required academic training that was too far beyond their ability or on the other hand, below their ability. When variances were computed, it was found that the variance of the experimental subjects was .273 while that of the control subjects was .917. A test of the significance of the difference between these two variances yielded an F = 3.36 which is significantly beyond the .01 level. Thus, it can be said that there was a significant difference between the experimental and the control subjects with regard to the variability of their vocational choice. Consequently, at the end of the project period, the control subjects were less realistic in their vocational choices than were the experimental subjects.

A somewhat different type of analysis is provided in Table XVII which shows the results of the responses to the question, "What kind of information has helped you most in school?" When interpreting these results one should note that none of the control subjects had in-school work experience while 21 experimental subjects had participated in the In-School Work Experience program, and 20 experimental subjects had community work-study experience.

Table XVII

Percent of Subjects' Responses to Question,
"What kind of information has helped you most in school?"

	Lecture	Class Discussion	Library	Discussion with Friend	Films	Encyclopedia	Discussion with Parents	In-School Work Experience	Community Work Experience
Experimental (N = 41) a	29%	37%	20%	20%	39%	15%	17%	N=21 62%	N=20 80%
Control (N = 47) b	36%	40%	15%	17%	30%	13%	4%	N=0 0	N=0 0

---

a Twenty of the experimental subjects did not provide this information.

b Fourteen of the control subjects did not provide this information.

% Percentage of respondents who had had experience and reported that it helped them most in school.

Evaluation of Table XVII indicates that 62 per cent of the experimental subjects who had the experience felt that In-School Work Experience helped them most in school. Of those who had Community Work Experience, 80 per cent felt that this experience was the most helpful. Thus, these findings strongly suggest that the experimental subjects found the progressive work experiences, which included counseling by the prevocational staff of the school and the DVR counselor, as contributing most to their understanding of the requirements of the world of work and their subsequent vocational adjustment.

An evaluation of possible differences between the two groups was made through analysis of the sub areas. Analysis of the differences of the two groups concerning the responses regarding "discussion with parents" indicates that the youth in the experimental group do report that they obtain much by talking with their parents. That is, the difference between the experimental and control groups on this particular variable is statistically significant at the .05 level ($\chi^2 = 3.84$). It appears that intensive social work service and vocational counseling provided these youth and their parents might account for improved communication between parents and subjects.

The Minnesota Hand Tool Dexterity Test was administered in an effort to gain a measure of the youth's proficiency in the use of ordinary mechanic tools. This test attempts to measure manipulative skill independent of intellectual factors. Data concerning the performance of the youth on this instrument can be found in Table XVIII. The hypothesis that the experimental subjects would make greater gains in their ability to use ordinary mechanic's tools as measured by the Minnesota Hand Tool Dexterity Test was not substantiated. This finding is difficult to interpret since experience, according to the manual, plays a prominent role in performance on the test and since experimental subjects were provided with learning tasks of a similar nature in an occupational arts laboratory. It could be possible that the experimental subjects were so oriented to a program where specific needs for learning were so well defined that they did not put forth their best efforts in completing tasks which were comparatively meaningless, such as the series of tasks required for these tests of hand tool dexterity. On the other hand, the experimental program may not have provided sufficient practice to promote significant gain.

Table XVIII

Mean Raw Scores
Minnesota Hand Tool Test

	Pre-test Mean	Post-test Mean	Difference
Experimental	9 min. 30 sec.	7 min. 45 sec.	1 min. 45 sec.
Control	9 min. 36 sec.	8 min. 05 sec.	1 min. 31 sec.
t_D	-.13	-.88	.20
No significant difference			

The Minnesota Clerical Test, a test of speed and accuracy in performing tasks relating to clerical work, yields scores in two areas, Number Checking and Name Checking. The results of these responses of the youth to this test is reported in Table XIX. Although the results were not statistically significant there was a trend in the hypothesized direction. The experimental youth did do better on this type of vocationally oriented task, especially in Number Checking ($p < .10$ level). Thus, it would appear that the work experience provided the experimental subjects tended to improve their speed and accuracy in performing tasks essential in clerical work. These data are presented in Table XIX.

The Purdue Peg Board Test was administered in an effort to gain a measure of the youth's manipulative skill. Data concerning the performance of the youth on this instrument can be found in Table XX. Although the results of the gain scores of three of the four portions of this test, work with right hand, work with left hand and assembly, were not significant at the .05 level of confidence

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Table XIX

Mean Raw Scores
Minnesota Clerical Test

	NUMBER CHECKING			NAME CHECKING		
	Pre-test Mean	Post-test Mean	Difference	Pre-test Mean	Post-test Mean	Difference
Experimental	47	77.5	30.5	49.9	68.1	18.2
Control	49.9	75.1	25.2	53.1	62.2	9.1
t_D	-1.20	.95	1.08	-.83	1.35	1.41
No significant difference						

Table XX

Mean Raw Scores
Purdue Pegboard Test

	Right Hand Mean		Difference	Left Hand Mean		Difference	Both Hand Mean		Difference	Assembly Mean		Diff enc
	Pre	Post		Pre	Post		Pre	Post		Pre	Post	
Experimental	17	18	1	15	17	2	13	13	0	34	36	2
Control	16	18	2	15	16	1	12	14	2	33	36	3
t_D	1.81	-.00	.57	.95	.72	.27	1.09	-1.25	-1.97	.89	-.27	-.1
No significant difference												

The Digit Symbol subtest of the Wechsler-Bellevue Scale, Form II, was administered in an effort to determine the rapidity with which the youth could learn to associate unfamiliar symbols with familiar numerals under the pressure of time limits. Table XXI contains the results of the responses to this test. A statistical evaluation of the gain scores earned by the youth reveal no significant difference between the experimental and the control group.

Table XXI

Mean Raw Scores
Digit Symbol Subtest of the Wechsler-Bellevue Scale, Form II

	Pre-test Mean	Post-test Mean	Difference
Experimental	50	57	7
Control	51	58	7
t_D	0.19	-.04	.23
No significant difference			

In summary, the findings in regard to vocational adjustment indicate superiority of the experimental group in the following respects:

- The data suggest that the experimental subjects did less "job hopping" than the controls.
- The experimental subjects received more post-school training than the control subjects.
- A significantly greater number of experimental subjects were employed on semi-skilled and skilled jobs where on-the-job training was provided by the employer than was true of control subjects.
- The experimental subjects were more realistic in establishing vocational goals compatible with their ability than was true of the control subjects.
- The experimental subjects who had participated in the In-School and Community Work Experience programs reported these to be the most helpful learning activities provided for them during their school attendance.
- It appeared that experimental subjects established better communication with their parents which seemingly can be attributed to social case work services, prevocational counseling, and counseling by personnel of DVR.

Social and Emotional Adjustment

One of the basic hypotheses of this study was that the experimental treatment program would have a beneficial effect on the social and emotional adjustment of the experimental subjects. To test this hypothesis several areas of adjustment were evaluated. One area investigated was the difference between the experimental and the control group in terms of the number of encounters with law enforcement agencies.

The number of encounters with such authorities prior to entry into the project is shown in Table XXII. An analysis of the data indicates that there was no significant difference between the two groups in terms of quantity of encounters with law enforcement agencies prior to entrance in the project.

Table XXII

Number of Contacts With Law Enforcement Agencies Prior to Entrance in Project

Number	0	1	2	3
Experimental	49	7	3	2
Control	51	5	3	2
No significant differences (χ^2 = .38)				

From this table it can be seen that a total of 100 of the 122 subjects in the project or approximately 80 per cent of the youth had never been officially known to law enforcement agencies regarding violations of the law prior to admission in the project.

Results of a survey of the records on the subjects during the project period are reported in Table XXIII.

Table XXIII

Number of Contacts With Law Enforcement Agencies During the Project Period

Number	0	1	2	3	4	5	6
Experimental	45	6	5	0	2	3	0
Control	46	11	2	0	0	1	1
No significant differences (χ^2 = 4.06)							

Evaluation of these results indicate that there was no significant post differences between the experimental and the control groups in terms of numbers of encounters with law enforcement agencies. Thus, the hypothesis that the experimental program significantly reduced the number of encounters with law enforcement agencies can not be accepted.

A further attempt to assess the relationship of the subjects with law enforcing agencies was made by considering the severity of offenses. In order to determine the severity of offense in terms of social and emotional adjustment, a study was conducted in which five social workers were asked to rank the description of the offense with regard to severity. The responses of the social workers were then rank ordered and grouped as seemed to be appropriate to empirically determine cutting scores. The following classificatory system was developed with (1) being the least severe and (5) the most severe:

1. Investigative interview
2. Curfew or traffic violations
3. Disorderly conduct, truancy, runaway, incorrigible, drinking
4. Shop-lifting, malicious destruction of property
5. Theft, assault, sex offenses, robbery and burglary

The preceding rating scale was utilized to evaluate the severity of the offenses of the youth. Information regarding legal offenses was obtained from duly constituted authorities through a review of court and other appropriate records in the cities of Champaign and Urbana and in the County of Champaign. No effort was made to obtain information from surrounding towns or from other states since it was felt that most of the offenses would be encountered in the immediate vicinity. Likewise, records of minors are reported to the local agencies when they occur outside the local area. These data are reported in Table XXIV.

Table XXIV

Severity of Offenses Prior to Entry in Project

	No Contact	Investigative Interview	Curfew or Traffic Violations	Disorderly Conduct, Truancy, Runaway, Incorrigible, Drinking	Shoplifting, Malicious Destruction of Property	Theft, Assault, Sex Offenses, Robbery, Burglary
Experimental	49	0	0	3	3	6
Control	51	1	0	4	2	3
No significant difference (χ^2 = 1.06)						

Evaluation of data found in this table suggests that although a few of the subjects had some involvement of a rather severe nature with law enforcement agencies, the majority of the subjects had no such encounters. No significant differences between experimental and control subjects with regard to severity of offense prior to entry in the project were noted.

The results of the study of the severity of reported contacts with law enforcement agencies during the project period are indicated in Table XXV.

Table XXV

Severity of Offenses During Project Period

	No Contact	Investigative Interview	Curfew or Traffic Violations	Disorderly Conduct, Truancy, Runaway, Incorrigible, Drinking	Shoplifting, Malicious Destruction of Property	Theft, Assault, Sex Offenses, Robbery, Burglary
Experimental	45	0	2	8	2	4
Control	45	1	3	5	4	3
No significant differences ($\chi^2 = 1.66$)						

Again, evaluation of the severity of encounters with law enforcement agencies during the project period indicates no significant differences between the experimental and control subjects.

In summary, it can be said that, although it was hypothesized that the experimental program provided for these youth would result in fewer encounters with law enforcement agencies, this hypothesis could not be accepted in light of the fact that there was no statistically significant difference between the two groups on the post measures of the number or severity of the cases. These findings are compatible with those of Longstreth, Stanley, and Rice (1964).

It was hypothesized that the subjects in the experimental group would attain greater social maturity than did those in the control group as a result of more appropriate learning experiences during the treatment phase of the project. At the initiation of the project the mean Vineland Social Quotients for the experimental subjects was 102.4 and for the control subjects was 101.4 A comparison of the differences of these scores indicated no significant difference between the two groups at the start of the project in terms of social maturity as measured by the Vineland Social Maturity Scale. These data are found in Table XXVI.

Table XXVI

Mean Raw Scores - Vineland Social Maturity Scale

	Pre	Post	Difference
Experimental	102.4	102.5	.1
Control	101.4	101.8	.4
t_D	1.22	- .56	- .58
No significant difference			

At the completion of the project a comparison of the gain scores on the Vineland Social Maturity Scale indicates there was no significant difference between the experimental and control groups that could be attributed to the project. Thus, the hypothesis that there would be a differential growth in the social maturity of the subjects that could be attributable to the treatment program was not supported.

An instrument designed to measure the youth's emotional growth in terms of his perceived peer acceptance was administered to each member of the experimental and control groups. Analysis of the initial data indicates that there was no significant difference between the subjects in the experimental and control group insofar as perceived group acceptance was concerned. A comparison of the gain scores made by the experimental subjects as compared with the control subjects indicates that, after the treatment phase of the project was completed, there was no significant difference in the perceived peer acceptance of the experimental subjects as compared with that of the control subjects. Thus, it can be seen that there was no change in perception of acceptance by peers that could be attributed to the experimental treatment program measured by the scale used in this project. These data are found in Table XXVII.

Table XXVII

Mean Raw Scores - Perceived Peer Relationship Scale

	Pre	Post	Difference
Experimental	110.0	109.0	-1
Control	110.4	108.4	-2
t_D	.00	.15	.14
No significant difference			

It was anticipated that, since youth in the project were frequently faced with frustration while participating in school activities, they would reflect this frustration to some extent by reporting symptoms of manifest anxiety. A comparison of the Taylor Manifest Anxiety scores attained by subjects in both the experimental and control groups was made at the initiation of the project. At that time, there was no significant difference between the experimental and control subjects on the Taylor Manifest Anxiety Scale. At the completion of the project analysis was made utilizing gain scores. Analysis of these scores indicated that there was still no significant difference between the experimental and the control subjects following treatment. Thus, the hypothesis that experimental subjects would manifest less anxiety is refuted. These data are presented in Table XXVIII.

Table XXVIII

Mean Raw Scores - Taylor
Manifest Anxiety Scale

	Pre	Post	Difference
Experimental	18.8	15.9	-2.9
Control	18.2	15.6	-2.6
t_D	.89	.21	- .27
No significant difference			

If an individual is to function adequately in the world today, it would seem that he would need to be aware of his assets and limitations and to be able to determine readily whether or not he was capable of attacking and successfully completing a task or, in a similar manner, to detect those tasks that were too difficult, beyond his capabilities, and then determine ways to avoid engaging in those activities that would lead only to frustration. In an attempt to measure this ability to anticipate success or failure, the "Could You Ever" test was administered. (Unpublished test by McCoy. See appendix.) In this task, the youth was asked to determine whether or not he felt he could ever engage successfully in such activities as learning to "ride a bike" or "become an opera singer". Two scores were obtained from this scale. The first score, called the Appropriate Task score, indicated whether or not the youth said "Yes" to those items which he could be appropriately expected to accomplish. The second score, the Inappropriate Task score, indicated whether or not the youth responded "No" to those items he could not be expected to accomplish. For example, a "Yes" to the question, "Could you ever learn to ride a bicycle?" would earn one point on the appropriateness scale. Similarly, a "No" to the question, "Could you ever become a famous opera singer?" would earn one point as being a correct response to tasks that were considered inappropriate or beyond the capabilities of the subject. At the initiation of the project, there was no significant difference between the two groups of subjects in the appropriateness or the inappropriateness area. See Table XXIX. Gain scores in terms of change that would indicate increased ability to perceive the appropriateness of an activity were determined and evaluated. The results of the analysis indicated there was no significant difference between the two groups in terms of their ability to determine their capabilities accurately or to determine appropriately their inability to attain goals that were beyond their scope. These data are included in Table XXIX.

Table XXIX

Mean Raw Scores - "Could You Ever" Scale

	Pre	Post	Post-Pre
Appropriate Task Score			
Experimental	41.6	40.0	- 1.6
Control	41.9	42.0	.1
t_D	- .48	- 1.75	- 1.51
Inappropriate Task Score			
Experimental	22.9	22.3	- .6
Control	25.0	23.3	- 1.7
t_D	-1.63	- .64	.68
No significant difference			

In summary, then, measures of the subjects' social maturity, perception of peer acceptance, perceived anxiety, and ability to determine the appropriateness or the inappropriateness of certain activities or goals were administered. No significant differences were obtained between the experimental and control groups at the completion of the treatment phase of the project on any of the above measures. Thus, the hypothesis that the experimental subjects would be significantly superior to the control subjects attributable to the experimental treatment program must be rejected.

One other measure of social and emotional adjustment, the California Psychological Inventory, was administered to the subjects. Results of a "t" test of the differences of the 18 sub scales on the California Psychological Inventory are reported in Table XXX. As can be seen, no initial differences were noted between the two groups except on the flexibility scale which was significant at the .05 level of confidence. In view of the fact that some 18 scales were used in this area, and only one, which would be expected by chance, was significant, it appeared that there was no significant difference between the two groups on the pre test measure.

Table XXX

Results of Analysis of Differences Between Matched Pairs of Experimental and Control Subjects on California Psychological Inventory Pre Tests and Post-Pre Tests

	Pre Tests t	Post-Pre Tests t
Do	.32	- .03
Cs	- .84	.94
Sy	1.53	-1.44
Sp	.55	.04
Sa	1.43	.28
Wb	- .30	- .88
Re	-1.52	- .94
So	.16	-2.12*
Sc	-1.71	-1.36
To	-1.16	.78
Gi	- .55	-1.02
Cm	1.23	-1.47
Ac	.66	-2.01*
Al	- .05	.06
Te	-1.05	.88
Py	-1.29	.75
Fx*	-2.16	-2.64*
Fe	- .31	.71

* Significant at .05 level

An analysis was made of the subjects' gain scores on the California Psychological Inventory. Only three of the 18 scores attained significance. The significant changes indicated that the experimental subjects were more flexible (Fx) ($p < .05$), while the control subjects were more socialized (So) ($p < .05$) and more concerned with achievement through conformity (Ac) ($p < .05$). When interpreting these scores, one should keep in mind that the initial hypothesis was that the youth in the experimental program would manifest significant improvement in the social maturity area, hence, the findings contrary to the hypothesis must be interpreted with caution.

If it can be assumed that the findings did, in fact, occur beyond the level of probability, then the following interpretation might be made. According to the California Psychological Inventory manual, individuals who score high on the socialization (So) scale might be considered to be serious, honest, industrious, modest, obliging, sincere, and steady; as being conscientious and responsible; and as being self-denying and conforming. Similarly, individuals high in achievement by conformance (Ac) are described as capable, cooperative, efficient, organized, responsible, stable, and sincere; as being persistent and industrious; as valuing an intellectual activity and intellectual achievement. On the other hand, individuals who are high in flexibility (Fx) are described as insightful, informal, adventurous, confident, humorous, rebellious, idealistic, assertive, and egotistic; as being sarcastic; cynical; and as being highly concerned with personal pleasure and diversion.

Since apparent differences were found in three areas (So, Ac, Fx), it seems necessary to attempt to ascertain some of the reasons for the differences. It may be that the experimental group, moved from one position on the scale to another as a result of treatment, or the control group could have moved from one position on the scale to another while the treatment group remained in the same position, or both groups might have changed positions on the scale. Any one of the preceding combinations, therefore, could result in the finding of a statistically significant difference between the two groups. The post-pre test gain scores are reported in Table XXXI.

Table XXXI

Pre and Post Mean Standard Scores on the Socialization (So), Achievement via Conformance(Ac) and Flexibility (Fx) Subtests of the California Psychological Inventory

		So		Ac		Fx	
		Pre	Post	Pre	Post	Pre	Post
Experimental	$\bar{X}$	40.74	37.31	30.44	30.11	43.44	47.23
	s^2	12.95	12.65	9.58	10.62	10.70	9.07
Control	$\bar{X}$	39.52	41.67	28.28	33.00	46.87	45.38
	s^2	11.96	12.57	12.42	12.41	10.22	10.94
High School Average	$\bar{X}$	49.5		39.9		50.0	

From this table it would appear that or the So Scale, the experimental group probably made some movement in the direction of becoming slightly more rebellious and given to excess, exhibition and ostentation in their behavior, whereas the control group moved slightly toward becoming more serious, industrious, and conscientious. The cross current of movement led to the finding of a significant difference between the two groups.

On the Achievement via Conformance Scale, there appeared to be no difference between the pre and post test scores of the experimental group while the control group seemed to have moved slightly toward becoming more cooperative, efficient, persistent, and industrious, and as valuing intellectual achievement.

On the Flexibility Scale there appeared to have been change in the experimental group in that they became more informal, adventurous, humorous, rebellious, and assertive, while the control group became somewhat more deliberate, cautious, worrying, guarded, and mannerly. Although differences on the three scales were noted, and some information has been considered regarding the direction of change by one or both groups, consideration also needs to be given to the relationship between the mean score of the subjects in this project and the normative scores for individuals around the country. According to the California Psychological Inventory manual, the mean standard sub scale scores for high school pupils range between 40 and 50 with a tendency for the mean score to be near 40.

On the Socialization Scale (So), the mean for high school pupils in general is listed as 49.5. The control group had a mean score of 41.6 while the experimental group had a mean score of 37.3. Thus, it can be seen that both groups of subjects were below the mean with the control subjects slightly higher than the experimental subjects.

On the Achievement via Conformance Scale (Ac), the mean for high school youth was 39.9 whereas the mean for the experimental group was 30.11 and the mean for the control group was 33.00. Again, both of the groups in this study were below the mean for all high school youth with the experimental group being slightly less conforming.

On the Flexibility Scale (Fx), the mean score of high school youth was 50.0 while the control group was 45.38 and the experimental group was 47.23. In this instance, the experimental group seemed to have become more flexible almost to the mean of the high school group.

In summary, it appears that the experimental group may have improved in a crucial area, Flexibility, one which may lead to an increased ability to be somewhat more assertive and to lessen time off between jobs once a youth has left school. On the other hand, the experimental subjects still need to improve in many areas, one being to become more serious and modest. It should be further noted that the control group apparently made some growth in the achievement via conformity area during the course of the project while the experimental group remained at approximately the same level as when they entered the project. An evaluation of all of these changes suggest that the control group has become somewhat more serious, conscientious, conforming, stable, deliberate, cautious, guarded, methodical, and rigid. Also, when it is taken into account that the intellectual efficiency of these subjects is low, it can be seen that the control subjects might become tense and anxious when placed in situations such as a regular classroom in which they felt themselves likely to fail. On the other hand, the experimental subjects can be seen as becoming somewhat more defensive, demanding, spirited, rebellious, and assertive. This finding receives some additional support in that they are below the national high school norms in the areas of Well-Being and Responsibility which suggests that they will have some self-doubts and will tend to be defensive as well as disbelieving and changeable. To an extent, then, it would appear that the control group might more closely approximate the desired school norm in that they will become somewhat more conforming and adhering to teachers demands, realistic or not, insofar as their intellectual ability will permit. On the other hand, as teacher demands increase and the disparity between the teacher demands and the subjects' intellectual ability increase, these youth will likely begin to feel increasingly pressured to become more rigid and conforming and, in a sense, less likely to be able to cope with the more flexible demands, changing needs, and the different expectations they will face in a work situation. In contrast, it may be that the more assertive, adventurous actions of the experimentals may enable them to change from task to task as the job expectations are altered in our ever changing world of work and thus they will be, to an extent, more vocationally oriented. This belief receives some support in the finding that all of the experimental subjects had jobs whether they were dropouts of the experimental program or graduates of the experimental program, while 24 per cent of the dropouts or graduates of the control group were unemployed six months after termination of school. It must be remembered, however, that all of these scores are relative in that, in general, all of the subjects continued to have a lower than average social and emotional score on this instrument when compared with the total population.

In addition to the areas assessed by the previously described scales, it was believed that the social and emotional adjustment of youth would be reflected in their attitudes toward and behavior in various aspects of the educational program. The remainder of this section is devoted to consideration of some of the findings from responses to a questionnaire which was devised to obtain information related to the efficacy of the project.

One question asked the youth to evaluate the extent to which it took them "more", "less", or the "same" amount of time to complete their work as compared with other pupils. The findings which can be seen in Table XXXII indicate that there was a significant difference between the two groups.

From the table it can be seen that the youth in the experimental group reported that it took them less time to prepare their lessons in class than did the controls. Conversely, the controls reported that it took them significantly longer to prepare their lessons than other pupils. It may be that the experimental youths' perception of the time taken to complete tasks reflects a realistic alteration of the curriculum in that the assignments made to the experimental subjects were more appropriate to their ability level and thus required less time to complete and were easier to accomplish. Also, when pupils engage in activities that they like and can achieve a measure of success, then perception of the passage of time will lessen.

In either event, since the youth in the experimental program felt that they were able to complete their work in less time, it might be expected that they would be better satisfied with school because they faced fewer frustrations in the classroom.

Table XXXII

Perception of Relative Length of Time Required
to Complete Assignments

	Takes Longer	About Same Time	Takes Less Time	Total
Experimental	16	11	13	44
Control	24	8	3	47
Total	40	19	16	91
Significant at .05 level (χ^2 = 12.23)				

During the evaluation of the project, the subjects were asked to report the approximate temporal origin of their dislike for school. Although most of the youth indicated a dislike for school, it should be noted that a total of 16 pupils from both groups gave no answer while 23 denied ever disliking school. There were no statistically significant differences between the experimental and control groups with regard to indications of dislike for school. These data are presented in Table XXXIII.

Table XXXIII

Grade Level of Perceived Dislike for School

	Gave No Answer	Always Have Disliked	Prior to 7th Grade	Prior to 10th Grade	Present Situation	Never Have Disliked
Experimental	5	7	8	5	8	12
Control	11	4	3	7	11	11
Total	16	11	11	12	19	23
No significant differences (χ^2 = 5.95)						

The youth were asked to indicate the subject they liked best. Twenty-six (29.9 per cent) of the subjects reporting indicated that they liked vocational subjects best. Seventeen (19.5 per cent) of the subjects indicated that math and science courses were their best liked subjects, while 18 (20.7 per cent) liked the social studies best. Somewhat surprisingly, the least often chosen as best subject was physical education where only 5 (5.7 per cent) selected this as their best liked subject. This is possibly related to the inappropriatness of the regular program in which they were integrated which tends to stress group competitive situations where these youth make a poor showing. These data are found in Table XXXIV.

Table XXXIV

Subject Area Chosen as "Best Liked"

	Language Arts	Social Studies	Math and Science	Fine Arts	Vocational	Physical Ed.
Experimental	4	8	11	4	13	3
Control	7	10	6	6	13	2
Total	11	18	17	10	26	5
Percentage (N = 87)	12.6	20.7	19.5	11.5	29.9	5.7
No significant differences ($\chi^2 = 2.71$)						

Thirty youth (35.7 per cent) chose language arts as their least liked subject while 27 youth (32.1 per cent) chose math and science as their least liked subject. Vocational activities and physical education were selected as least liked approximately 10 per cent of the time, hence ranked among the lowest as being least liked. These data are presented in Table XXXV.

Table XXXV

Subject Area Selected as "Least Liked"

	Language Arts	Social Studies	Math and Science	Fine Arts	Vocational	Physical Ed.
Experimental	13	7	11	1	4	5
Control	17	3	16	0	5	2
Total	30	10	27	1	9	7
Percentage (N = 87)	35.7	11.9	32.1	1.2	10.7	8.0
No significant differences ($\chi^2 = 5.41$)						

The positive regard for vocational subjects held by the experimental group is not unexpected and provides strong support for the belief that vocationally oriented courses, appropriately taught, are of considerable benefit to disadvantaged youth who are functioning at a dull ability level. If one is to build upon the interests and desires of pupils when developing curriculum, continued emphasis on the vocational area seems thoroughly warranted.

In summary, the findings with regard to social and emotional adjustment are:

- The experimental program did not reduce the number of encounters with law enforcing agencies as hypothesized.
- There was no significant difference between the number of encounters with law enforcement agencies between the experimental subjects and the control subjects during the project period.
- There was no significant difference between the severity of offenses of experimental and control subjects during the project period.
- There was no significant difference between the experimental and control groups on measures of social maturity.
- No statistically significant differences between the experimental and control groups were found with regard to change of perception of acceptance by peers as a result of the treatment program.
- There was no significant difference between the experimental and control subjects following treatment on measures of manifest anxiety.
- There was no significant difference between the two groups in terms of their ability to determine inappropriateness or appropriateness of tasks.
- The only significant differences on social and emotional variables between the two groups were obtained on the California Psychological Inventory. Of the 18 scores, only three attained statistical significance. The experimental subjects attained higher scores on the Flexibility Scale, while the control subjects attained higher scores on the Socialization and Achievement through Conformance Scales.

Achievement

One of the basic hypotheses of this study was that the experimental subjects would attain higher scores on achievement tests at the conclusion of the study than would the control subjects. As seen in Table XXXVI there were no significant differences between the two groups on pre test measures of achievement. Differences in achievement gain scores were calculated by determining the difference between the pre test score and the post test score for each subject. A comparison of these gain scores for each pair of subjects was then made by using a t test of the differences as described in Walker and Lev (p. 152f, 1953). The results of this analysis are reported in Table XXXVI.

Table XXXVI

Pre and Post Mean Scores on Stanford Achievement Tests

	Paragraph Meaning	Word Meaning	Spelling	Arithmetic Reasoning	Arithmetic Computation
Pre Experimental	5.5	5.9	6.1	6.1	6.0
Pre Control	5.4	5.9	6.0	6.0	5.9
Pre t_D	.74	.26	.74	.60	1.08
Post Experimental	5.6	7.0	7.0	6.5	6.2
Post Control	5.7	6.7	6.7	6.4	6.1
Post t_D	- .30	.00	- .72	.59	.34
Post-Pre t_D	- .82	- .28	- 2.04	- .001	- .93
No significant differences					

As can be seen from the foregoing table, no differences were found in the achievement test gain scores attained by the experimental group as compared with the control group. Thus, the hypothesis that the experimental subjects would make greater academic progress than the control subjects during the treatment phase of the project was not substantiated. Contrary to these findings, Sorenson and Matthews (1964) reported some academic gains of slow learners after a year of treatment in a special program. All of their subjects, however, were seventh graders. Subjects in this study, on the other hand, include both junior and senior high level youth who would be expected to be more resistive to change.

In an attempt to understand these findings, the question was posed, "If the experimental subjects made no greater academic gains than the control subjects, might not all of the subjects, in fact, be achieving at or near expectancy?" Utilizing the mean mental ages of the experimental and control subjects at the time they entered the project, it was found that they should be expected to achieve at approximately a 7.1 grade level. These data are presented in Table XXXVII.

Table XXXVII

Results of Stanford Achievement Tests
(Pairs = 61)

	Paragraph Meaning	Word Meaning	Spelling	Arithmetic Reasoning	Arithmetic Computation
Initial $\overline{X}$	5.46	5.97	6.09	6.05	5.99
S.D.	1.36	1.59	1.66	1.56	1.51
Final $\overline{X}$	5.65	6.84	6.85	6.45	6.18
S.D.	1.52	1.69	1.68	1.44	1.33
Achievement Expectancy Based on Mental Age	7.1	7.1	7.1	7.1	7.1

From this table it can be seen that the subjects were approximately one to one and a half years behind expected attainments in the areas tested. Thus, they were not working at a level commensurate with mental age expectancy. Since there is a significant discrepancy between M.A. and achievement, it may well be that youth of the type enrolled in this project have, in fact, reached their academic peaks in the school subjects by the time they reach the late junior and senior high levels. If so, then one wonders about the efficacy of continued emphasis upon enhancing the achievement in the tool subjects of these individuals on a vertical basis. It may be that their skills will be sufficient to help them attain those vocational goals of which they are capable; if so, the emphasis should be placed on helping these youth put their skills to use in vocationally oriented situations. On the other hand, it could be that research studies are needed to determine if the academic achievement of comparable youth can be enhanced through some other innovative approach.

In a continued effort to determine whether or not there were significant differences between those youth who had dropped out of the experimental group and those who dropped out of the control group, an analysis of variance was conducted on the initial Stanford Achievement Test scores of all dropouts. The results of the analysis of variance are reported in Table XXXVIII.

Table XXXVIII

Analysis of Dropouts' Initial Scores
On the Stanford Achievement Test

	df	Sum of Square	ms	F
Between Subjects	28	383.19		
Exp. vs Control	1	9.45	9.45	.94
error (b)	37	373.74	10.10	
Within Subjects	156	135.41		
Achmt Tests	4	33.16	8.29	13.66**
AB	4	1.48	.37	.54
error (w)	148	100.77	.68	
Total	194	518.60		

** Significant at .01 level

From this table it can be seen that there were no significant differences between the scores earned by the dropouts of the experimental as compared with the dropouts of the groups on their initial Stanford Achievement Test scores. Thus, there appeared to be no differential dropping out of school related to achievement.

In summary, the findings in regard to school achievement are:

- The experimental subjects made no greater academic progress as a result of the treatment program than did the control subjects who were provided with the conventional instructional program.

- Dropping out of school in this homogeneous group was not associated with lowered achievement.

Additional Pertinent Findings

In an endeavor to more thoroughly understand the needs and problems of the youth, the following data were obtained and evaluated (see Table XXXIX). Only one of the 122 subjects were found to have a mild orthopedic handicap. Three of the 122 in the study were reported to have epilepsy. Eight of the 122 were reported to have had chronic medical problems of one general type or another. Prevocational counselors and/or social workers reported that 12 of the subjects had some other type of medical defect. As a result of the medical evaluations obtained by the DVR counselor on all experimental subjects, 7 additional experimental subjects were found to have a physical defect. Social workers, during the compilation of case histories on all control youth, identified 5 additional subjects who had a physical defect.

Table XXXIX

Reported Physical Abnormalities of Subjects in the Project

	EXCEPTIONALITY					
	Visual Diff.	Hearing Impair.	Orthopedic Impair.	Epilepsy	Chronic Medical Problem	Other Physical Defects
Experimental	17	3	1	2	3	7
Control	12	0	0	1	5	5

Among the characteristics of the subjects in this study, both experimental and control, 23.7 per cent were reported to have visual defects. It is interesting to note that there was no significant difference between the two groups as to the reported number of visual defects (see Table XXXIX). It may well be that since these defects tend to be rather obvious to teachers and others and since there is a competent vision screening program within the school system, additional medical evaluations of these youth revealed few hidden or heretofore unknown visual problems. In view of the fact that almost one-quarter of the youth did have visual defects, it is apparent that serious consideration should be given to this problem when similar programs are undertaken by other school systems.

In contrast to the large number of visual defects, only 3 (4.9 per cent) of the experimental group were noted to have hearing defects. All of these defects were classified as mild with preferential seating indicated in only one instance. Insofar as the control subjects were concerned, none were reported to have manifested a significant hearing loss. Evaluation of the possible difference between the two groups yielded no statistically significant difference.

An evaluation of the data pertinent to the subjects' involvement with various community agencies during the treatment program indicates a significant difference in the areas of health services and financial assistance of the individuals in the experimental and in the control groups. Data are presented in Table XXXX.

As can be seen in this table, the experimental group obtained more service than did the control group from health and financial assistance agencies. Apparently the need for these services was identified and the youth and their parents helped to gain these services through the functioning of the project. This suggests that additional demand for these services will be made in those communities where a program similar to this experimental program is instituted.

Table XXXX

Community Agencies to Whom Subject or Other Family Members Are Known

	Child Welfare	Court Service	Health Service	Family Service	Mental Health	Public Assist.
Experimental	10	15	10*	7	4	22*
Control	9	13	2	6	6	10

* Significant beyond the .05 level

When frequency of use of the mental health type agency is considered, there were no statistically significant differences between the experimental and control subjects. It may be that since referrals of youth or their parents to agencies are often made by social workers and since the schools are adequately staffed with social workers who are trained to offer many of the services available in a mental health agency, the needs of pupils were met in the school setting. Thus, the lack of a differentiation between the experimental and control youth can be understood.

Chapter VII

CASE STUDIES

Summary of Case Study Findings

An analysis of the detailed case study material on each subject has yielded additional information about the overall adjustment of these youth. This analysis mainly utilized qualitative data, although quantitative data in the form of scores on various tests were used to help evaluate the qualitative information. Psychological reports, medical reports obtained through the Division of Vocational Rehabilitation and from cumulative folders, social histories and reports of social case work services, vocational data obtained from prevocational counselors, parent interview material, progress reports by teachers, and anecdotal records were sources of information about each subject in the project.

The main manifestations of the problems of these youth were as follows: (1) Lack of respect for authority figures which manifested itself in refusal to adhere to school rules and regulations, open defiance of teachers, disrespectful attitudes toward parents, and negative attitudes toward law enforcement officials. (2) Feelings of inadequacy as revealed by reluctance to attempt school-like tasks because of fear of failure, excessive bidding for attention and reassurance, and a facade of well-being and confidence. (3) Poor attitudes toward school associated with a history of school failure and retention. Almost without exception these youth had been retained at least once during the primary grades due to their inability to cope with the expectations of the school. The great majority had been retained at least two years by the time they entered the junior high school. Retardation in reading based on mental age expectancy was generally the case. While the subjects were also retarded in arithmetic computation, this retardation was less marked than in reading. As these youth crippled up the educational ladder, the cumulative effect of their retardation was reflected in declining grade patterns and achievement test scores. (4) Social immaturity as indicated by low frustration tolerance, frequent outbursts of temper, lack of inner controls, inability to accept constructive criticism, physical approach to solving social problems, and unwillingness to accept the responsibility for their own behavior. Generally these youth were considered to be the most severe behavior problems in the entire school system. Their hostility and resentment was generally overt. They displayed a high level of anxiety. (5) Immediate gratification took precedent over long range goals, therefore it was difficult for such youth to apply themselves to a task which did not result in tangible and immediate rewards. (6) Unrealistic goals and aspirations resulting in the choice of a vocational goal either above or below their ability and the inability to identify the inappropriateness or appropriateness of tasks. (7) Poor peer acceptance in relationship to the mainstream of the school. They tended to cluster together and form their own groups or gangs. While they seemed to gather together with youth of their own kind for identify, they did not seem to develop any close personal relationships or strong group ties. They seemingly distrusted their peers as they distrusted adults. (8) They were poor vocational risks in that they tended to have few salable vocational skills such as good work habits, punctuality, dependability, ability to establish rapport with co-workers and employers; they had difficulty in concentrating and maintaining an adequate attention span and were poorly motivated as indicated by lack of perseverance. Many of these youth had never had any regular work experience either at home or in the community and those who had had jobs usually had not held them for any length of time. (9) Inadequate home environment as manifested by lower moral standards than in middle class homes, less emphasis on learning for learning"s sake, less interaction between parents and children, more broken and disorganized homes, less supervision of the activities of the youth, crowded home conditions, and fewer materials in the home to stimulate intellectual development and foster a desire to get an education.

Case Studies

The following four case studies were selected as being representative of these youth. Two were experimental subjects and received a prevocational curriculum and services and two were in the control group and received no special treatment. All names are fictitious and other identifying data have been omitted.

Case of Joe

(Experimental Subject)

Reason for Referral

The educational counselor referred Joe, a tenth grade Caucasian male, age 17 years and 7 months, as a likely candidate for this project in that he had a long history of school failure, had been referred to the educational counselor because of acting out behavior in the classroom, and had indicated to the counselor that he was considering dropping out of school.

Background History Prior to Entrance in Project

Social History

Joe was born of parents of low socio-economic status. His father, who was an itinerant painter, was killed in an automobile accident when Joe was three years of age. His stepfather was a laborer with a small construction company and was usually unemployed several months of the year. The mother was a waitress in a bar; her working hours were from 5 p.m. to 2 a.m.

In addition to Joe, who was the oldest child from the previous marriage of the mother, there were three younger siblings, one girl by the former marriage and two boys by the current marriage.

Joe indicated in a discussion with his counselor that his mother and stepfather did not get along very well. Evidently there was constant bickering, especially during periods when the husband was unemployed. Joe explained the situation as, "We kids are in the middle of it all. I stay away from home as much as I can. I don't get along with Mom's old man, he takes a swing at me every time he gets a chance. As soon as I can, I'm leavin' home."

When both parents were away from home, Joe was expected to take care of his younger siblings. Instead of staying home in the evenings while the mother was working, the father spent his time in a local tavern where his friends congregated. Thus, some of the wages that should have gone to his family were spent on himself.

The mother seemed to be sincerely interested in her children but had so little time to spend with them that her influence was minimal. It was necessary for her to work outside of the home to provide the bare necessities for her family and by the time she did the household chores her energy was expended. In addition, she had a long history of physical problems.

In an interview, the mother expressed concern over the inadequacy of her husband as a father but also seemed to feel that he was better than no father at all and thus was "putting up with him".

Joe seemed to have few sustained constructive leisure time interests such as reading. He ran with a gang of boys who were known to juvenile authorities. Joe had not been charged with any offense of record, although some of his friends had been. The times he had been questioned by law enforcing officers had resulted in beatings by his stepfather who refused to discuss these situations with him.

School personnel were aware that this boy had a weak male role model who rejected him and a mother who was so emotionally and physically spent coping with the father and helping to earn a living that Joe did not receive much emotional support or encouragement from her.

Social workers had attempted to work with the boy and with the parents almost ever since Joe entered the first grade. The stepfather had not been cooperative; in fact, he was openly hostile. This attitude interfered with the mother's following through with recommendations of the social worker.

When an interpretation was made of the project, the mother was eager to have Joe participate. She was particularly concerned about his completing school and seemed aware that he was on the verge of dropping out of school and possibly becoming a delinquent. The stepfather refused to participate in the conferenc and let it be known that since Joe was not his child, he would not concern himself as to what happened to him.

Medical History

According to the medical examinations found in the cumulative records, Joe had had the usual childhood diseases. Although he appeared to be healthy, according to medical examinations required by the school, nevertheless, he was absent frequently from school because of "illnesses" which the mother described as, "Joe has a stomachache" or "a headache", or "is not feeling well". Social workers felt that Joe's illnesses were likely psychosomatic to avoid the frustrations he was encountering at school as well as a bid for attention from his mother.

At the time Joe was referred as a possible candidate for the project, he was of average height and weight with no known physical defects.

School History

Joe entered the first grade at the age of 6 years and 5 months. His school records indicated that he was socially and emotionally immature and was unable to successfully cope with the academic expectations of the school. He was retained in the first grade and again at the fifth grade level because of school failure. His promotions consistently were made on the basis of social factors rather than academic achievement. His grades were below average, usually failing, and achievement tests indicated that he was functioning academically two to three grades below mental age expectancy. For example, when he was referred to the project at the chronological age of 17 years and 7 months, achievement test results indicated that he was functioning at the 5.7 grade level in reading and at the 5.2 grade level in arithmetic.

Teachers reported that Joe's attention span was short; he had difficulty concentrating on and completing tasks; he usually failed to complete outside assignments; and he almost never volunteered to participate in classroom discussions. Whenever he was aware that a test was to be given, it was not unusual for him to be absent on that day. His behavior in class was often objectionable and resulted in his being required to remain after school in a detention room as a disciplinary measure. The only course in which he seemed interested was printing, a subject in which he was enrolled at the time he was referred for the project.

Psychological Findings

Joe was seen on several occasions by school psychologists over the years and was given a comprehensive psycho-educational examination just prior to his entrance in the project. Findings consistently revealed that Joe was functioning in the dull normal range of intelligence. The Stanford-Binet Individual Intelligence Scale administered to Joe at the chronological age of 17 years and 7 months revealed a mental age of 13 years and 7 months, which yielded a deviation IQ of 86. Previous WISC test results were essentially the same.

During the testing situation, Joe seemed uncertain and anxious and was extremely reluctant to involve himself in the demands presented him in the course of the evaluation. His responses were slow and he needed constant reassurance. He seemed to work best on well structured tasks at which he could easily determine the requirements expected of him. As would be anticipated, he did less well on tasks that required abstract thinking. He was particularly weak on memory items which possibly may have been due to emotional problems which interfered with concentration. His higher level successes on the Binet were on tasks measuring his general comprehension and the ability to integrate facts into a meaningful whole. These tasks involved the use of concrete explanations and materials in problem solving situations.

On the Vineland Social Maturity Scale, his social quotient was within the average range; this seems to be logical since this scale evaluates independence rather than interpersonal relationships and Joe seemed to be somewhat independent for his age. His interpersonal relationships were, however, poor. On the Taylor Manifest Anxiety Scale, he was considerably below the norm for his age, which is compatible with observations of social workers and teachers.

The psychologist's general overall evaluation of this boy's personality using interview data and data from the California Psychological Inventory, was that Joe was fearful of failure, had marked feelings of inadequacy, had strong needs for success, was distrustful of adults, and passively rejected suggestions from them. He had not made a positive identification with a male adult figure who could serve as a good model for him, consequently, he was seeking identity with a group of peers of questionable character.

On the Purdue Pegboard and Minnesota Hand Tool Dexterity Tests, Joe's responses indicated that he had at least average competencies on these instruments which measure eye-hand and fine muscle coordination. This was of particular interest since this boy had had little experience with tools.

Prevocational Experiences Prior to Entrance in the Project

Joe's vocational experiences prior to his entrance in the project consisted primarily of incidental chores required of him by his family and several part-time jobs of short duration at which he was unsuccessful. At the time he entered the project he did not have a part-time job.

A prevocational counselor's interview indicated that Joe's vocational liabilities were greater than his assets. He was not dependable, he did not persevere, his appearance was unkempt, he did not get along well with authority figures, and he had no short or long range realistic vocational goals. When specifically asked what he would like to do for a living, he said that he would like to be a teacher of printing. He did not realize that such a position would require college attendance.

Recommended Educational Program and Services

After carefully evaluating all available data on Joe prior to his entrance in the project, the following vocational rehabilitation plan was delineated by the project staff:

> Physical Examination. Since it was routine for all youth of the experimental group to receive medical examinations prior to becoming a client of DVR and since this youth was absent frequently from school for reasons reported as illness, the project staff was especially interested in obtaining medical information on Joe.
>
> Individual Social Case Work. Individual social case work seemed indicated since Joe had a long history of anti-social behavior, poor peer acceptance, and hostility toward authority figures. It was further recommended that a male social worker be assigned to him since he had not had an opportunity to identify with a good male model.
>
> Group Social Work. Group social work was recommended to enhance interpersonal relationships with peers since Joe had had relatively little opportunity to communicate his feelings or share his ideas about things of concern to him.
>
> Prevocational Counseling and Work Experience. Since this youth had no successful job experiences and had few salable vocational skills, it seemed essential for him to be placed on a closely supervised In-School Work Experience job where he could learn what is expected of him as an employee and develop good worker traits which would prepare him for the next progressive work phase of the program, Community Work Experience on a part-time basis. In view of Joe's age and his need for financial remuneration, it seemed imperative that he be placed on a Community Work Experience job at the earliest possible time. An In-School job such as a duplicating machine operator in the Work Experience Laboratory was recommended since he had indicated an interest in the vocational area of printing.
>
> Placement in the Eleventh Grade. Since this youth had been retained twice during his school attendance, which seemingly did not enhance his level of achievement, it was felt that placing him in a higher grade in the project might have a positive effect on his attitude toward attaining a high school diploma and attending a trade school.
>
> Modification of Curriculum. While Joe was working at a level below mental age expectancy in academic areas, it was felt that at his age he would not make marked progress on a vertical basis. The

approach recommended for Joe was one that would enable him to develop skills in practical, work-oriented situations. Thus, the In-School and Community Work Experience programs were felt to be the major focus, with the academic program supporting and reinforcing learnings which would insure the vocational rehabilitation of this youth.

Referral to the Division of Vocational Rehabilitation. Although all youth in the project had a vocational handicap and thus were eligible for services from the Illinois Division of Vocational Rehabilitation, each youth in the experimental group was referred on an individual basis. The DVR counselor was involved with the case from the time the youth entered the project; therefore, it was recommended that Joe be referred to the DVR counselor as a client to receive the rehabilitative services available through that agency. Joe had such meager prevocational skills that it was felt imperative for representatives of the school and DVR, the prevocational counselor of the school and the counselor of the Division of Vocational Rehabilitation, to work closely and intensively on providing this youth with progressive work experiences to foster the acquisition of good worker traits and to cooperatively develop a realistic vocational plan with the youth and with his parents, which might well include entry into a trade school.

Results of Treatment Program

The results of a medical examination obtained through the Illinois Division of Vocational Rehabilitation indicated that Joe had a slight hernia which needed attention. He underwent corrective surgery during the Christmas holidays the first year he was in the project.

An internist's examination did not reveal any further physical basis for the vomiting and headaches which had resulted in absences from school. Thus, the project staff felt that absences were associated with social and emotional factors rather than physical ones.

The curriculum in the classroom focused on helping him acquire knowledge and skills needed in the world of work. His work habits and interests in learning seemed to improve as his class work became more vocationally oriented and thus more meaningful to him. Actually, he gained only about 1.5 years in reading on a standardized achievement test, and about .5 years in arithmetic. Thus his reading grade level was 7.2 and his arithmetic level was 5.6. The important consideration, however, was that he was making use of his academic skills in situations that were meaningful to him and that his attitude toward school had improved as reflected by more regular attendance and an expressed desire to complete high school.

Immediate movement of Joe to the eleventh grade from the tenth grade, in addition to the many services he was receiving, seemed to have an overall positive effect on his attitudes.

Joe received individual social case work from a male social worker. As a result of this service, coupled with other aspects of the program, Joe became more self-reliant and competitive, better able to accept criticism and guidance from authority figures, and generally better able to control himself. He rarely had to spend time in a detention room for misconduct in the project classes.

The social worker reported that Joe seemed to profit from group social work in that he became more outgoing in expressing himself and was more willing to accept comments and suggestions from his peers without becoming overly threatened. He likewise seemed to gain some insight as to how to develop a better relationship with his stepfather.

The social worker continued to attempt to work with the parents. It was felt that only minimal changes in attitude and practice were achieved; therefore, it would seem that the hopes for this boy would have to be in fostering the development of strengths within him.

The prevocational counselor placed him in the In-School Work Experience Laboratory as a duplicating machine operator. While initially his worker traits were far from desirable, he was able to improve to the point that after his corrective surgery at Christmas time, the counselor placed him on a part-time community job for remuneration. This job entailed working as a printer's helper in a local hospital which had one printing machine. Joe seemed to enjoy his work very much and his prevocational skill ratings from his employer were above average. The employer encouraged Joe to go to trade school to gain additional knowledge of the printing trade. The DVR counselor worked intensively with Joe and his parents during his final year in school in preparation for Joe's attending a trade school. The recommendations from the prevocational counselor, employer evaluations, Joe's vocational interests, results of vocational performance tests administered by Vocational Rehabilitation personnel, and the trade school admission test results were data the DVR counselor evaluated in developing a vocational plan for Joe. A graphic arts trade school training program seemed indicated to the DVR counselor. A study of the financial status of the family by the DVR counselor revealed that financial assistance from DVR would be needed for Joe to attain this vocational goal. After high school graduation, DVR provided the financial resources for Joe to attend a graphic arts trade school in a neighboring state. He completed the program in the prescribed time and upon his return to the community he obtained employment as an apprentice printer.

Summary

In summary, Joe was a Caucasian youth of dull-normal intelligence who was rejected by his stepfather and received little encouragement and support from his mother. He had few salable prevocational skills and had a negative attitude toward school and authority figures. His grades were generally failing, except in printing, and his scores on achievement tests indicated considerable retardation in reading and arithmetic. He complained of numerous physical ailments and frequently was absent from school.

Joe was an experimental subject who was provided with closely supervised progressive work experiences and a modified curriculum. The DVR counselor was involved with the case as soon as Joe was placed in the experimental program. A physical examination provided by this agency revealed a need for some correction work which was promptly completed through DVR.

After graduation from the experimental program, he attended a graphic arts trade school in another state and upon return to the community became an apprentice printer. At the time this case study was written, his employer stated that he was getting along satisfactorily. It is anticipated that he will be able to complete his apprenticeship and become a journeyman printer. Thus, it appears that the experimental program vocationally rehabilitated this youth.

Case of Mary

(Experimental Youth)

Reason for Referral

A junior high school classroom teacher referred Mary, a ninth grade Negro female, age 15 years and 10 months, as a likely candidate for this project because of her inattention in class, inability to accomplish classroom work, frequent tardiness and her acting out behavior. The educational counselors verified that this was Mary's typical pattern of behavior in all classes.

Background History Prior to Entrance in Project

Social History

Mary was born of parents of low socio-economic status. Her mother stated that she herself could have graduated from college if she had not had to quit high school in the sophomore year to help her parents support their large family. Mary's natural father, reported to have had some college training, died when Mary was two years old. The mother remarried when Mary was five years old. Her present husband was employed as a dishwasher in a local restaurant and the mother remained at home as a housewife. Mary was the only child of the first marriage. She had two younger stepbrothers and a baby stepsister by the present union.

The family lived in a small two bedroom home which was in dire need of repair. Although the mother attempted to maintain the interior of the home, the physical structure and limited financial resources of the family hampered her from furnishing the home to her satisfaction.

Mary related to the school counselor that she did not get along with her mother because "she is always pushing me to make better grades so I can go to college". Mary had warm feelings for her stepfather and felt sorry for him because her mother downgraded his lack of education and his low paying job in front of the children. In the case of an argument between the parents, Mary tended to side with her stepfather rather than her mother.

Mary seemed to have few sustained constructive leisure time interests such as reading. In fact, she rebelled when expected to read materials beyond her comprehension which her mother attempted to force her to read. Her growing rebellion against her mother was evidenced by Mary's participation in her activities of a questionable nature, such as unchaperoned teen-age dances in a local hangout, where many of the habitues were known to law enforcement officials.

School personnel were aware that Mary was faced with tremendous educational conflicts; that is, on the one hand, Mary had extremely limited ability and seemed to recognize it and, on the other hand, her mother had inappropriately high educational aspirations for her which Mary realized she could never attain.

Mary and her mother had received the services of a school social worker for several years. The primary goal of the work with the mother was to get her

During the testing situation, Mary was so defensive that at one time it was necessary to terminate, temporarily, the testing session because of her refusal to participate in one series of tasks. She saw the examiner as another authority figure trying to force more inappropriate (college-bound) tasks upon her; therefore, she was unwilling to involve herself in such activities. She worked best at visual motor tasks and those tasks at which she was allowed to draw conclusions from concrete examples. She was less capable at those tasks measuring quality of vocabulary, often indicative of one's general level of functioning.

On the Vineland Social Maturity Scale, her social quotient was inappropriately high for a girl whose mother was so protective of her. Thus, she was probably reporting on those activities she preferred rather than upon those activities she actually accomplished. On the Taylor Manifest Anxiety Scale, her scores fell markedly below the norm, indicating that she had more anxiety than the average youth of her chronological age. These data were compatible with the reports of the classroom teacher and social worker.

The psychologist's general overall evaluation of this girl's personality, using interview data and data from the California Psychological Inventory, was that Mary was fearful of failure, had feelings of inadequacy, frequently appeared depressed, was distrustful of adults and authority figures and had not developed appropriate means of developing lasting peer relationships. In case of frustration she was likely to withdraw from the situation. Her relationship with her mother was so poor that Mary relied on her girl companions for the advice and suggestions other girls might gain from their mothers.

On the Purdue Pegboard and Minnesota Hand Tool Dexterity Test, her eye-hand and small muscle performances were considered to be within the normal range. The results of the Wechsler-Bellevue, Form II, Digit Symbol subtest were essentially in agreement with these findings.

Prevocational Experiences Prior to Entrance in the Project

Mary's vocational experience prior to her entrance into the project as an experimental subject consisted only of incidental chores in the home which were forced upon her by her mother. At the time she entered the project she did not have a part-time job.

A prevocational counselor's interview indicated that Mary obviously lacked any worker traits which would enable her to be employed. Although she had not developed any short-term or long-term vocational goals because of the conflict of interests within the home, when specially asked what she would like to do for a living, she stated, "I would like to fix people's hair". She was unable to identify the means to gain entrance to this vocation. The prevocational counselor felt that Mary's personal appearance indicated a decided interest in this vocational area.

Recommended Educational Program and Services

After carefully evaluating all available data on Mary prior to her entrance in the project, the following educational plan was delineated by the project staff:

Physical Examination. Although school medical records did not indicate any physical anomalies, Mary should receive a medical examination through the auspices of DVR prior to her placement on a job. This procedure was followed routinely with all experimental subjects.

Individual Social Case Work. Mary should be assigned to a female social case worker to assist her to accept adult authority figures as supportive and to develop some skills for getting along more amiably with her mother. Likewise, the social worker should work with the mother to help her accept her daughter's limitations and build on her strengths. The mother needed help to understand that nagging and other types of pressure would not foster improved achievement. It was felt that the social worker might refer the mother to a community clinic for additional help since there were problems other than those directly related to Mary.

Group Social Work. To enhance interpersonal relationships with peers, group social work was recommended since Mary had had little opportunity to communicate her feelings or share ideas about things of concern to her.

Prevocational Counseling and Work Experience. In view of Mary's lack of vocational experiences and her limited vocational skills, it seemed essential for her to be placed in a closely supervised In-School Work Experience job where she could learn what is expected of her as an employee and to develop positive worker traits which would prepare her for the next progressive work phase of the program, Community Work Experience. In view of her one positive vocational asset, good grooming, it seemed appropriate to consider her for an In-School job where she could use this asset in a positive manner, such as a kindergarten helper, a hostess, or a teacher's assistant.

Placement in the Tenth Grade. It seemed advisable to place Mary in the tenth grade even though her academic skills were limited. Her attitude toward school and a long history of failure did not seem to warrant keeping her back with younger youth. This plan was consistent with project policy based on the knowledge that retention generally does not enhance achievement or improve attitudes toward school.

Modification of Her Curriculum. In view of Mary's dislike for reading, the emphasis in the reading program should be on descriptive material and pamphlets dealing with her stated vocational choice--beautician. Visits to beauty schools in the community were an integral part of her curriculum. A conference with the head trainer at a local beauty school seemed to be appropriate to obtain information regarding the factual material covered in academic courses in such a school. For example, beauticians need to have some knowledge and understanding of basic physiology in addition to other skills related to this trade. Thus, the curriculum could provide her with a foundation for entering this training program. The curriculum should, in general, revolve around and enhance her success on a part-time job in the In-School Work Experience program and in the subsequent Community Work Experience program.

Refer to the Division of Vocational Rehabilitation. All youth in the project had a vocational handicap and thus each experimental subject was referred on an individual basis for services from this agency that seemed necessary for the vocational rehabilitation of the youth. In view of Mary's lack of prevocational worker traits, it was imperative for the school staff and the DVR counselor to intensively work on this case from the time of her entrance in the program to insure her vocational rehabilitation. Since the mother had an unrealistic aspirational level for this girl, it was important for the DVR counselor to work closely with the mother to interpret how this agency could assist her daughter in obtaining the training to enter an appropriate vocation. The DVR counselor and project staff should have frequent case conferences to share information and to mesh services.

Results of Treatment Program

Through the DVR, Mary was given a thorough medical examination. The results did not identify any vocationally handicapping physical abnormalities.

A female social worker was assigned to Mary during the time she was in the project. This social worker was able to establish good rapport with Mary, which was important since Mary had a poor relationship with her mother. Through working individually with Mary and with the mother to promote an improved understanding of the underlying reasons for their conflict, some slight improvement was noted. However, it was felt that it would be advantageous for the mother to be seen by an outside agency in that undue pressure placed on Mary by the mother might possibly be associated with her feelings toward an inadequate husband. In that event, it would be more appropriate for the mother to be seen by someone outside the school. This was accomplished and the school social worker and personnel of the Mental Health Clinic maintained close contact.

As the mother's attitude toward her daughter became more accepting and supportive, Mary became more cooperative with authority figures in the school and seemingly was more motivated to learn.

Group social work enabled Mary to realize that she was not the only youth who had conflicts with her parents. Through discussions of specific and hypothetical situations with peers, Mary seemed to gain some real "know-how" as to ways of avoiding unpleasant and unproductive verbal battles with her mother. Coupled with a real change in the attitudes of the mother, Mary was experiencing a more congenial home life.

The prevocational counselor placed Mary on an In-School Work Experience job as a hostess in the senior high school. This work entailed answering the telephone, meeting and greeting visitors, running errands for the staff and collecting and recording attendance. Initially she found it difficult to assume the responsibility for working independently. She was easily distracted, especially by boys, which interfered with her performance and was a source of irritation to the staff. The prevocational counselor spent considerable time with Mary, helping her understand the importance of the tasks to which she was assigned, especially the image of the school she conveyed by her irresponsible behavior. The staff were encouraged to praise Mary for improvements or for tasks well done so that she would be motivated to put forth greater effort.

After one year in the In-School Work Experience phase of the prevocational program, Mary was placed on a Community Work Experience job as a waitress in a "short order" lunch counter. While Mary generally enjoyed the work, she sometimes became frustrated and discouraged when other waitresses received more tips and more attention from patrons. During peak periods she sometimes resented curt instructions from the boss and on several occasions expressed a desire to quit her job. Through interviews with her employer, counseling sessions with Mary and on-the-job visitations, Mary was helped to allay her self-doubts regarding her adequacy on the job. The DVR counselor was able to help the mother become more supportive of her daughter. The mother began to see the importance of Mary's success on her job in terms of preparation for subsequent vocational adjustment. She was able to participate constructively in planning sessions concerning Mary's post school training. The mother's interest and enthusiasm for the program was conveyed to Mary and seemingly helped Mary weather some of the harassing problems she sometimes faced on her Community Work Experience job.

During the course of the mother's interviews with the DVR counselor, she revealed her concern about her husband's physical problems which caused him to be absent frequently from work because of backaches. The DVR counselor determined that the father was eligible for the services of his agency, was accepted as a client, and was found to be in need of minor surgery which was performed through the agency. After he recuperated, he was able to obtain employment as a custodian under Civil Service.

The improved financial status of the home due to the husband's regular employment and the supplementary earnings of the daughter seemed to generate a more satisfying home environment.

Mary's work skills developed to such a degree that the prevocational department of the school and the staff of DVR, after extensive counseling and testing, determined that Mary should be placed in a training school for beauticians on a half-time basis. The other half day, Mary was enrolled in high school in project classes.

Since Mary was so well thought of at the restaurant where she had been working, her boss asked her to work during the evenings, when possible. Mary was able to work approximately 10 hours weekly. Thus, she was able to maintain some income during her training period in beauty school.

At the time this case study was written, Mary was enrolled in beauty school making satisfactory progress and working part-time in a restaurant. The DVR counselor had several prospects in mind for Mary's placement when her training was completed.

Mary was placed in the tenth grade after entrance in the project. This procedure did seem to encourage her to stay in school and have a more positive attitude toward learning. The fact that the curriculum was vocationally oriented and took into consideration Mary's vocational interests seemed to be a major factor in bringing about the acquisition of those traits conducive to becoming a good employee.

Post test results indicated that Mary had accelerated her reading achievement approximately two years; however, in arithmetic she progressed only one year during the three-year project period. It should be noted, however, that Mary was working at a level approximately commensurate with her mental age at the termination of the project.

Summary

In summary, Mary, a Negro female, was in the ninth grade when she was referred as a possible candidate for the project because she was markedly educationally retarded and manifested acting out and disruptive behavior in the classroom which interfered with not only her school progress but that of others in her class. An investigation of the home indicated that she was from a low socio-economic level family.

Mary's relationship with her mother was poor, primarily because the mother set unrealistic academic goals for her and put undue pressure on her to achieve. She was openly rebellious and defiant toward her mother; this hostility manifested itself in her identifying with peers who were well-known to law enforcement officials. Through the combined efforts of the social worker, the DVR counselor, the prevocational staff of the school and the project teachers, Mary's mother began to set more realistic goals for her daughter. As the mother became more realistic and accepting of Mary's strengths and weaknesses, Mary became more confident in herself and more motivated to learn.

The school modified Mary's curriculum in such a way that the learning activities focused on helping her acquire the knowledge and skills essential to becoming a beautician, while the progressive work experience program focused on helping her develop salable worker traits.

The placement of Mary in the tenth grade seemed to have positive effects on her attitude toward school. Also, her success in the In-School Work Experience program as a hostess and in the Community Work Experience program as a waitress enabled her to not only acquire knowledge of the world of work but also the desirable worker traits necessary for subsequent vocational adjustment.

During Mary's senior year, she was enrolled in a beauty school on a half-time basis with financial assistance from DVR. She continued to work approximately 10 hours a week in the restaurant where she had worked on a half-time basis. Mary was making satisfactory progress in the beauty school. DVR had several opportunities for her placement in beauty salons following her completion of beauty school. There was every reason to believe that Mary was well on her way to becoming vocationally rehabilitated.

Case of Cindy

(Control Subject)

Reason for Referral

Cindy, a 17 year and 4 month old Caucasian female enrolled in the tenth grade, was referred by a social worker as a possible candidate for this research project because she had failing or near-failing grades, seemed to be poorly motivated to apply herself to achieve educationally, and was associating with youth who were anti-social. Her family background suggested that she was from a low socio-economic level home.

Background History Prior to Entrance in Project

Social History

Cindy and her twin brother were the youngest of five children in her family. It was interesting that Cindy claimed to be the youngest in her family because her twin brother was considerably "taller" than she. The father was intermittently employed by a local wholesale food concern. The mother had, at times, been the primary wage earner in the family due to the frequent illnesses of the father. Both parents had been reported to be in ill health. At the time Cindy was referred for this project the mother was a cashier in a supermarket from 8 a.m. to 5 p.m.

The family moved to the present vicinity from a southern state when Cindy was approximately 13 years of age. Her three older sisters were married and maintained separate residences within the area at the time Cindy entered the project. The mother stated that her older daughters had been "wild" and she hoped that Cindy would not get in trouble and dropout of school like they had.

Inconsistency seemed to best describe the child-rearing practices in the home. Although the parents verbalized an interest in education, it was interesting to note that none of the older siblings had earned a high school diploma. The parents reacted in an aggressive fashion whenever they felt that their children were slighted or unfairly criticized by authority figures. The mother expressed strong feelings to the social worker that the reason Cindy was failing in school was because "the teachers are pickin' on her".

There were times when neither parent was present when Cindy returned home from school. She had been known to bring friends into the house in the absence of her parents. On several occasions the social worker made a home call when Cindy was absent from school and found Cindy entertaining friends. When such episodes were discussed with the mother, she claimed that Cindy was not feeling well and had her permission to stay home. She blamed the parents of the other children for not seeing to it that their children were in school instead of bothering Cindy when she was ill.

Teachers' reports on Cindy contained such statements as "boy crazy", "craves fun", "seems to be poorly adjusted", and the like. During her junior high school years it was noted that she frequently was in the company of peers who were prone to be anti-social.

Medical History

There were no negative findings regarding Cindy's birth or early physical development. She had measles, mumps and chicken pox with no apparent aftereffects. No abnormalities had been reported in any of the physical examinations obtained in compliance with the school law. Cindy, however, claimed to have frequent headaches. She stated that two of her sisters were forced to dropout of school at the twelfth grade level prior to graduation because they were "going blind". The girl said that she was afraid that this might happen to her, also. No support for these beliefs could be found in school records. There were records to the effect, however, that these girls dropped out of school because of pregnancy.

School History

Cindy attended school in a small town in Kentucky the first five years of her school attendance. She did not submit an official report card upon entrance to this school system but stated that she had previously made all "A's", however, progress reports on Cindy after she entered the schools in this area indicated that she was unable to do grade level work in the sixth grade and was given a social promotion because she was overage. Evidently she did not enter the first grade in Kentucky at the usual age. She was so markedly retarded in all areas and did so poorly in the seventh grade that it was necessary for her to repeat the grade. Her mother rationalized her failure in this way, "Cindy is upset goin' to a new school. She is afraid she isn't goin' to do all right. She's so nervous she can't remember anything. Those teachers in that other school weren't very good and didn't learn her much either. That's why she's havin' a hard time learnin' here."

Cindy told the social worker that she did not like school because it was "too hard for her". She also said that she felt very bad about failing because she did not like to be in a grade with the "little kids".

She further confided to the social worker that she would dropout of school if she could find a steady job but to date she had not been able to secure full-time employment. She did indicate that her mother wanted her to stay in school and not be a "good for nothin' like her older sisters". Cindy did seem to want to learn but apparently felt that succeeding in school was a hopeless task for her.

At the close of Cindy's eighth grade attendance in school, after having made a preponderance of failing grades, the teachers decided it would be of no benefit for her to be retained and, therefore, gave her another social promotion to the ninth grade. She was passed on to the tenth grade for similar reasons. In fact, she became so fearful of failure that her school progress seemed to regress the longer she stayed in school. Her most frequent response to questions asked by the teacher was, "I don't know".

Prior to her entrance in the project, she achieved an average grade level in reading of 6.0 and an average grade level in arithmetic of 5.4. Group intelligence tests indicated that she was below average in intelligence. Even though her group IQ scores placed her in the dull-normal range, she was at least two years retarded academically according to expectancy based on mental age.

Teachers reported that Cindy found it difficult to remember facts from one day to the next and was easily distracted. When she failed a test it was not uncommon for her to cry. In addition to her short memory span, Cindy found it difficult to transfer learnings and to generalize. Her meager experiential background was a decided handicap to her.

The homemaking teacher seemed to take a real interest in Cindy and felt that she was able to make average progress in practical aspects of the work that did not require her to read. She gave Cindy the examinations orally and Cindy was able to make passing grades in that subject. Cindy also enjoyed an art class and was able to meet the requirements of that course making grades ranging from "D" to "C". She was failing in all other subjects when she was referred to the project.

Psychological Findings

During the psychological examination, Cindy was unusually quiet and seldom smiled. Her behavior vacillated between responses which were rapid with a facade of self-assurance, to ones which were slow, uncertain, and seemingly painful. When the latter occurred she became frustrated, frequently cried, and had to be redirected and reassured by the examiner. It is possible that Cindy had some difficulty with visual perception. This girl was left-handed but her performance on paper and pencil tasks was not consistently executed in a manner appropriate for a left-handed individual. She frequently held her paper at an odd or at a totally inappropriate (right-handed style) angle. Her speech and expressive ability were adequate for the tasks presented her.

On the basis of her responses to the 1960 Stanford-Binet Intelligence Scale administered prior to her entrance in the project, scores indicated that Cindy's school learning ability was at the lower extreme of the slow learner range. She earned a mental age of 12 years and 10 months which, when compared with her chronological age of 16 years and 4 months, yielded a deviation IQ of 83. Cindy was able to satisfactorily accomplish all of the tasks one normally expects of the average ten-year-old child. Her higher level successes were on tasks measuring her ability to associate verbal concepts with concrete material. She was less capable when required to accomplish abstract reasoning or to discriminate, to compare, and to utilize judgment adapting responses to specific situations. Cindy had several handicapping factors which might help explain her low rate of performance in the classroom; her slow rate of intellectual development, the rigid affect which hindered her adjustment to new material, a poor memory for meaningful material, inability to accomplish abstract reasoning, and possibly, a visual perception handicap. On the basis of her mental age, Cindy should have been capable of academic work at a low or middle sixth grade level.

On the basis of her responses to the Vineland Social Maturity Scale, Cindy apparently had not had the opportunities to develop independence as had other youth of her chronological age. She scored markedly below the norm or social age and social quotient. Her teachers and her peers reported that the girl apparently had few limits placed upon her behavior, and she seldom felt compelled to stay within those limits which had been placed. Her mother seemed to permit her to have excessive freedom and at the same time fostered dependence upon her. Thus, the inconsistent handling of the girl in the home and the lack of firm limits apparently prevented her from developing the independence necess to score on this type of social maturity scale.

On the Taylor Manifest Anxiety Scale, Cindy was markedly below the norms for her chronological age. Her responses to the California Psychological Inventory indicated that Cindy had strong feelings of inadequacy. She appeared self-defensive, apologetic, under-controlled, impulsive and confused. Cindy apparently lacked self-direction and self-discipline. She was suspicious of others and had marked feelings of disbelief in herself and distrustfulness of others in social situations. At times she did appear to be sympathetic and helpful.

On the Purdue Pegboard and Minnesota Hand Tool Dexterity Tests, Cindy scored markedly below the norms. She likewise scored in the lower range of dull-normal ability on the Digit Symbol subtest of the Wechsler-Bellevue, Form II. Thus, it appears that Cindy had very limited abilities in eye-hand and fine muscle coordination.

The psychologist's general overall evaluation of this girl's personality using interview data and data from the California Psychological Inventory and Taylor Manifest Anxiety Scale was that Cindy was an immature, impulsive, irresponsive girl who had deep seated feelings of inferiority and inadequacy which manifested themselves in a strong dislike for school and poor school attendance, distrust and dislike for authority figures, and identification with youth who were hostile and who engaged in anti-social acts.

Prevocational Experiences Prior to Entrance in the Project

According to Cindy, she was assigned several responsibilities of a house-keeping nature, but the parents were so accepting of the girl's behavior that it is doubtful if she were ever required to accomplish the assigned tasks. Prior to her entrance as a control subject in the project, her prevocational experiences had largely been baby sitting on an infrequent basis, a "curb-hop" for a local drive-in restaurant where she was dismissed after a few weeks because she did not get to work on time, and as a waitress in a restaurant where she worked on Saturdays for a short span of time and was dismissed because she "couldn't keep the orders straight". In an interview regarding her vocational aspirations, Cindy stated that she wanted to become a nurse. When further questioned regarding her choice she explained, "I'd like to wear a white uniform".

Developments During the Project Period

Cindy, a control subject, was provided with the regular educational program. Her school progress continued to be poor resulting in failing grades. She dropped out of school the second half of the eleventh grade after an argument with a teacher who, she claimed, threatened to "flunk" her. She consistently searched for others to whom she could shift the locus of responsibility for her actions and failures. These attitudes continued to be reinforced by her parents.

During a post interview with project staff, Cindy was unable to identify any vocation in which she would be interested other than that of a housewife. She was, at the time, going "steady" with a school dropout several years her senior. This youth had been well known to the social workers and their files were bulging with recordings of attempts to help him ameliorate his social and emotional problems. If Cindy chooses to take this youth for a mate, the prospect of a stable happy marriage does not seem to be in the offing. This friendship appears to be an example where two unsuccessful, unhappy, non-productive individuals have gravitated toward each other seeking some support and satisfaction that has not been available to them from other sources.

This young female dropout appears to have been in need of a vocationally-oriented curriculum where the tool subjects were presented at a level consistent with her learning ability and couched in content which was meaningful to her and where success was possible. It appears that a progressive work experience program may have offered her challenging and worthwhile experiences which would have enabled her to acquire some salable worker traits, traits which she heretofore had not been able to develop primarily because of the inconsistent handling in the home and inappropriate educational offerings. Since she was interested in the field of nursing, it is too bad that she could not have had the opportunity to be a nurse's aide in a hospital in a work-study program.

School was so frustrating for Cindy that she finally gave up in despair and dropped out without any tangible means of earning a living. As one might anticipate, her weak parents gave her spending money and did not seem too concerned about her dropping out of school as long as she "kept out of trouble".

It would appear, however, that Cindy's dropping out of school and being unemployed set the stage for anti-social acts of one kind or another, especially since she tended to associate with others whose values and goals did not suggest that they would become contributing members of society.

Summary

In summary, Cindy was a Caucasian female of dull-normal intelligence who was inconsistently handled by her parents and actually discouraged from taking responsibility for her own acts. She attended the first five grades in a school in the south, and was ill prepared to cope with the curriculum of a sixth grade class in this community. Her achievement scores indicated a retardation in reading and arithmetic of from two to three years below mental age expectations.

While medical information was essentially negative, Cindy complained of frequent headaches. Her height was below average and her weight was somewhat excessive for her size. Generally, she appeared to be in good health.

Cindy dropped out of school the second half of her junior year in high school. It seemed apparent that this girl was not provided with the cirriculum or services she needed to hold her in school and to vocationally rehabilitate her. While she had not become a juvenile delinquent when the follow-up was made after the termination of the project, there were some manifestations that were warning signs as to what might be in the offing. Her associates seemed to be highly questionable. They, too, were school dropouts and some had already become involved with law enforcing agencies because of violations of the law. Cindy was unemployed and did not seem to be too concerned about earning a living since her parents continued to indulge her and give her spending money. She seemed to place primary emphasis on having fun. Follow-up data also revealed that she had no vocational aspirations.

A gaze into the crystal ball reveals a picture that is not encouraging, one which depicts a girl who is poorly adjusted socially, emotionally, and vocationally, one who is poorly prepared to take the responsibilities expected of an adult in our society. Unless vocational rehabilitative services are made available to Cindy, her vocational and personal future is dim indeed.

Case of Earl

(Control Subject)

Reason for Referral

A junior high school assistant principal referred Earl, a ninth grade Negro boy, age 16 years and 2 months, as a likely candidate for this project based on Earl's history of school failure, poor social adjustment, and his apparent dislike of school. He also was associating with youth who were manifesting severe anti-social behavior.

Background History Prior to Entrance in Project

Social History

Earl moved to this vicinity from Mississippi. He was the third of four children born to a father employed as a field hand and a mother employed as a domestic. The family "split up" when Earl was in the third grade at which time the mother moved to this community with Earl and his younger brother. The father remained in Mississippi with the older girls. According to reports, the father than lived with his mother who took care of the girls. The mother lived with a sister who had been a resident of this vicinity all her adult life. Although Earl's mother had not divorced her husband and had not seen him since moving to this area, she had four additional children. She worked as a domestic and received welfare payments for the support of her children.

Earl indicated to the educational counselor and to the school social worker that a procession of men visited his mother and aunt. Earl had mixed feelings concerning this situation. He enjoyed the extra spending money he received but rejected the social discomfort resulting from it, especially when he was involved in a "Mammy-Whammy game".* Since he had not resolved his feelings regarding his mother's promiscuity, he attempted to minimize emotional upsets by seeking out companions with similar home situations.

Earl spent most of his spare time on the street with his small group of friends--bound together by the many problems associated with unfortunate home environments. The gang members were all classes as pre-delinquent by juvenile authorities. Their offenses prior to the initiation of this project had been beatings of smaller boys and suspicion of strong-arm robbery of paper boys.

Earl and his mother had received social case work services since he entered the school in this area. The mother was verbally cooperative but did not follow through with any suggestions. The home conditions were so negative that they seemingly negated any constructive work accomplished by the school. Earl seemed to view the social worker as a neutral with whom he could talk or use as a sounding board when the pressures were great. Apparently, however, he was unable to make any permanent changes in his attitudes and overt behavior as a result of these services.

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* This is a game that involves down-grading and ridiculing a boy's mother.

Verbally the mother expressed interest in her children but did not seem to have the ability to implement her verbalizations. The home was characterized as having few if any qualities that would encourage a youth to attain an education or the interest and support that would foster healthy emotional and social development.

Medical History

Medical examinations required by the school, found in the cumulative folder, showed that Earl had had the usual childhood diseases. His frequent absences from school, reported to be due to illness by the mother, were known to be for other reasons by school officials.

Earl's physical condition was felt to be good at the time of referral for this project. He was of average height but slightly underweight with no known physical defects.

School History

Earl entered the first grade at the age of five years, eleven months. He attended school in Mississippi for the first two years and part of the third year. Upon moving to this area, he was placed at the third grade level but was unable to cope with expectations and was retained at the close of the school year. Earl attended the same elementary school for grades three through six. His grades were consistently low, his achievement was poor, and his promotions were based largely on social and physical reasons rather than on academic attainment.

Earl was retained in the seventh grade because he lacked background in the tool subjects felt to be essential for coping with the academic work in subsequent years. His promotions in junior high school, however, continued to be based on social and physical factors in that he consistently remained academically from two to three years below grade level.

Teachers reported that Earl's attention span was short, his interest in school was lacking, and he had marked difficulty getting along with his peers as well as with authority figures in the school. The only bright spots on his report card were his grades in industrial arts. He received "B's" and one "A" in this subject in the eighth grade. His teachers said he was genuinely interested in and possessed some talent in this subject. All written material, including tests, were read to him. Earl frequently asked if the instructors were going to have the shop open at night or on Saturday and was sure to be there if the shop were open.

When referred for the project at the chronological age of 16 years and 2 months, achievement test results indicated that he was functioning at the 3.7 grade level in reading and 4.2 grade level in arithmetic. Thus, he was poorly prepared for making progress in academic areas at the junior high level.

Psychological Findings

School psychologists had seen Earl on several occasions since his entrance to the present school system. He was given a comprehensive psycho-educational examination just prior to his entrance in the project. The Stanford-Binet Individual Intelligence Scale administered to Earl at the chronological age of 16 years and 2 months revealed a mental age of 12 years and 11 months, which yielded a deviation IQ of 84. Previous WISC test results were essentially the same.

During the testing situation Earl was sullenly cooperative. Although his speech was intelligible, it contained many colloquialisms and sub-cultural mispronunciations. His rate of response during the evaluation was always slow with frequent requests for repetition of questions. As the testing situation continued, Earl frequently resorted to non-verbal physical movements in response to the questions presented, such as a shake of the head or a wave of the hand, even, at times, a sidewise movement of the eyes.

Earl's highest level successes on the Binet were attained on those tasks measuring rote memory for meaningful auditory material and ability to apply logical thought in solving concrete problems. His weaknesses were in the area of vocabulary definition, abstract reasoning, and memory for visual stimuli.

On the Vineland Social Maturity Scale his social quotient was within the average range. His mother allowed him considerable freedom to come and go as he liked, thus, he did seem to have developed a measure of independence that seemingly was reflected on the scores he obtained on this instrument. On the Taylor Manifest Anxiety Scale, Earl scored markedly below the norms as would be expected of a boy who had little security in his home or in the school situation.

The psychologist's general impression of this youth's personality based on a clinical interview, the above-mentioned test results and the California Psychological Inventory, was that Earl evidenced feelings of inadequacy and rejection and was confused in his identity and role as a male figure. His feelings of hostility were expressed through group participation in delinquent acts. On a one-to-one basis in the school setting, Earl was usually sullen and resistive, giving the impression that he was suspicious of adults who might take advantage of him or down-grade him.

On the Purdue Pegboard and Minnesota Hand Tool Dexterity Test which assess eye-hand and fine muscle coordination, Earl was below average. The Wechsler-Bellevue, Form II, Digit Symbol subtest scores likewise indicated he was functioning below the norms for his chronological age.

Prevocational Experiences Prior to Entrance in the Project

Prior to his inclusion in the project as a control subject, Earl had not held a part-time job. He was not required to do any chores around the home and volunteered to do none. He worked one summer detasseling corn but quit after two days because it was "too hot". At the time of his entrance into the project, he did not have a part-time job. When prodded to respond to the question, "What kind of work would you like to do?", Earl's vocational choice was, "To be a pimp". This youth did not appear to have acquired any knowledge and skills that would be assets to him in the world of work. He was obviously badly in need of vocational rehabilitation. His attitude toward work of any kind was negative. He wanted to get money the easy way without putting forth any effort. His social skills were so inadequate that he would find it extremely difficult to work amicably with co-workers or employers in almost any kind of work situation. His general attitude was that the world owed him a living and he owed the world nothing. His hostile overt expression of his dislike and distrust of the human race painted a very dreary and discouraging picture for his future life adjustment unless intensive help were forthcoming in the very near future.

Developments During the Project Period

During the course of the project, serving as a control subject, Earl's home condition did not change. He continued to have minimal contact with the home, using it primarily as a place to eat and sleep. During the second year of the project Earl and a member of his gang were arrested and convicted on charges of beating and robbing a pizza delivery boy. His mother paid his fine and Earl was placed on three years probation with stipulations that he attend school regularly and get a part-time job. Earl did not attend school regularly; however, his mother wrote to the school stating that he was ill. He continued to receive failing grades and dropped out of school in the latter part of the tenth grade. Consideration was given by law enforcing authorities to sending him to a corrective school, however, there was a long waiting list. The probation officer recommended that in the interim Earl obtain full-time employment.

Earl held two jobs in the community during the project period. He worked at a car wash establishment on an irregular basis, particularly just prior to his visit to the probation officer. For a one-week period, he worked as a kitchen helper in a hotel but was dismissed because of failure to conform to employee regulations regarding time and quality of work.

One month before the termination of the project, Earl and two of his gang were arrested on charges of armed robbery. They called a cab to take them home, but instead had placed a gun at the back of the driver's head, took his money and fled. The cab driver reported the address of the robbery and an investigation by the police resulted in the identification of Earl and his gang. In view of Earl's previous record, it was felt that he would be dealt with severely. His trial was scheduled for the fall and consequently the outcome was not known when this case study was written. Earl broke several appointments with psychologists who had scheduled him for post testing even though he was to be paid to come back and take the tests. He gave as a reason for breaking appointments, "I had somethin' else to do". The psychologist finally went out to his home and brought him to the office for testing. He had essentially made no gains on any of the post test measures. His reading achievement level was 4.0 and his arithmetic achievement level was 4.4. Socially and emotionally he had regressed. He indicated the acquisition of few if any salable vocational traits as would be expected since he had no steady jobs during the project year.

Summary

In summary, Earl, a Negro male of dull-normal intelligence, moved to this vicinity from a southern state when he was in the third grade. The mother deserted the father and moved to this area to live with an aunt. She took the two boys with her and left the two girls to live with their father. The mother worked as a domestic and received payments from a welfare agency to support her children.

This youth did not have a strong male figure with whom to identify. There was a procession of men in the home, but no consistent stable positive male influence. Earl was aware of the mother's relationship with these men and was resentful of the stigma associated with such activities.

Earl received little support from his mother and did not think she was too interested in his welfare. His self-concept was poor because he had experienced so little success. Generally, he considered himself to be an inadequate individual. Because he had experienced so little success, he had little notion of what he was capable of doing, thus, he was not able to formulate realistic vocational goals. He had a negative attitude not only toward work but toward society in general. His expressed desire to be a "pimp" seemed to indicate that he wanted to be given a "hand-out" without putting forth effort.

Earl persistently made failing grades in school. The only subject he liked was industrial arts. The success in this one area was apparently not enough to hold him in school. At the tenth grade level he gave up and dropped out of school with no vocational plan in mind. While he was still in school, he and his gang "beat up" a delivery boy which resulted in their being placed on probation. After Earl dropped out of school and while still on probation, he and his gang were arrested for the armed robbery of a cab driver.

It seemed safe to say that Earl did not have any salable worker traits at the termination of this project. The regular academic program coupled with a very discouraging and socially unhealthy home environment was not conducive to fostering educational progress or adequate social and emotional development. In a sense, society had really failed this boy.

Earl's associates were of like kind and his delinquent behavior suggested that if some drastic steps were not taken immediately to rehabilitate him, he would wind up behind bars supported by the taxpayers rather than being a vocationally rehabilitated contributing member of society.

Chapter VIII

SUMMARY AND IMPLICATIONS

Problem

Thirty to 40 per cent of the school population drop out of school. Dropouts have difficulty obtaining and maintaining employment and unemployment is a breeding ground for delinquency. A majority of school dropouts come from low socio-economic status homes and have intelligence quotients which fall within the classification of slow learners (IQ 75-90). While all school dropouts are not slow learners, delinquents, and unemployed, there does seem to be a predisposition for the slow learner to drop out of school, to be delinquent, and to be unemployable.

Changes in technology are making it mandatory that the school, community, and such agencies as the Division of Vocational Rehabilitation improve their programs and provide the training and services necessary to enable the slow learner to compete in the world of work. Since the number of jobs for minimally trained workers is diminishing rapidly, it is imperative that the slow learner be provided with an educational program and post school trade training which will prepare him to be employed at his maximal level.

The general problem with which this research was concerned is the vocational rehabilitation of slow learners from low socio-economic status homes. The specific problem was that of evaluating the effectiveness of a prevocational curriculum and services designed to rehabilitate slow learners who are prone to become school dropouts, delinquents, and unemployed.

Organization of the Study

A total of 537 youth between the ages of 13 and 21 were referred through screening procedures as potential candidates for this research project on the basis of below average and failing grades, low achievement, poor social and emotional adjustment, low socio-economic status homes, and below average group intelligence quotients. Socio-economic status was determined by applying portions of the Warner's Scale to the father's occupations, area of residence, and condition of housing. The final selection criteria was that each subject attain an IQ between 75 and 90 on the Stanford-Binet Individual Intelligence Scale, Form LM, and be of low socio-economic status.

Of the 286 who met the final criteria, 91 matched pairs were established on the basis of sex, race, IQ, SES, and CA. One member of the pair was selected randomly for inclusion in the experimental group and the other was assigned to the control group.

Only those subjects who were in the program for at least two years were included in the final analysis. When data on one member of the pair could not be obtained for such reasons as institutionalization, service in the armed forces, move without leaving forwarding address, and refusal to cooperate, data on the other member of the pair was omitted from the statistical analysis. The number of matched pairs which constituted the final sample was 61, or 122 subjects.

Methods of Appraisal

School retention and attendance data were obtained from school records and follow-up interviews with school personnel. Vocational adjustment was evaluated by means of structured interviews and records in the prevocational files in the school and in the office of the Division of Vocational Rehabilitation. Social and emotional adjustment were measured by using items from the California Test of Personality; the Taylor Manifest Anxiety Scale; the Vineland Social Maturity Scale; a measure of the subjects' perception of appropriateness and inappropriateness of tasks; and the California Psychological Inventory. Records of law enforcement officials were utilized to determine the number and severity of offenses. The subjects' achievement in arithmetic and reading was measured by the Stanford Achievement Tests. Eye-Hand Coordination was assessed by the Digit Symbol subtest of the Wechsler Bellevue Scale, Form II; the Purdue Peg Board; the Minnesota Hand Tool Dexterity Test, and the Minnesota Clerical Test.

Other quantitative and qualitative data were analyzed by the case study approach. These data include information from reports and interviews with employers, parents, teachers, administrators, and personnel from community social agencies; social case work files; prevocational and DVR records; medical reports and self reports by subjects.

Results

Hypothesis: School Retention and Attendance

It was hypothesized that the experimental subjects who were provided with a prevocational curriculum and services would have significantly better attendance and fewer school dropouts as a result of this program than would be true of subjects in the control group who were enrolled in a conventional curriculum. These expectations were confirmed.

Of the 91 original experimental subjects, only 13 dropped out of school. In sharp contrast, 30 of the 91 control subjects dropped out of school. Thus, 2.3 times as many youth dropped out of the control group as dropped out of the experimental group. The difference between the two groups on number of dropouts was significant at the .01 level of confidence.

Forty-two per cent of the male control subjects dropped out of school while only 11 per cent of the male experimental subjects dropped out of school. The number of females who dropped out of school from each group was essentially the same, approximately 39 per cent. Although significantly more subjects as a whole dropped out of the control group, the findings indicate that the experimental program was highly successful in holding male subjects in school; it was no better than the conventional program in holding female subjects in school.

It was predicted that the experimental subjects would be absent fewer days than the control subjects. Analysis of the data supported this hypothesis at the .05 level of confidence.

Hypothesis: Vocational Adjustment

It was hypothesized that slow learners in the experimental group would have significantly better employment records than subjects in the control group.

An evaluation of the findings regarding the number of full-time jobs held during the project years revealed that the experimental subjects did less "job hopping" than did the control subjects. This difference was significant at the .05 level of confidence.

While the level of jobs attained by the experimental subjects was not statistically significant (higher than the control subjects) there was a trend in the hypothesized direction ($p < .10$).

A significantly larger number of experimental subjects continued their training on the job or in trade schools as compared to subjects in the control group. Eight experimental subjects had completed or were enrolled in trade schools while only onecontrolsubject had enrolled in a post school training program but dropped out after one semester because of academic failure. In addition 8 experimental subjects were employed in semi-skilled or skilled jobs where the employer provided on the job training as compared with 2 control subjects who held jobs under similar conditions.

It was predicted that the experimental subjects would be more realistic in their selection of vocational goals than would be true of control subjects. This hypothesis was accepted. Analysis of the data indicates that the experimental subjects set more realistic vocational goals than the control subjects who tended to select vocational goals which were either beyond or below their capabilities.

Although it was hypothesized that the experimental subjects would score higher on certain measures of eye-hand coordination as a result of the treatment program, this hypothesis was not confirmed.

Hypothesis: Social and Emotional Adjustment

It was hypothesized that subjects in the experimental group would be significantly superior to subjects in the control group with regard to social and emotional adjustment. This hypothesis was essentially refuted in that there were no significant differences between the two groups that could be attributed to the experimental treatment program in regard to number of encounters with law enforcement agencies; severity of offenses of subjects during the project period; social maturity; perception of acceptance by peers; maifest anxiety; or ability to determine inappropriateness or appropriateness of tasks.

The only significant findings on social and emotional variables that differentiated between the two groups were on data obtained from the California Psychological Inventory. Only three of the 18 subtest scores on this measure attained statistical significance. Experimental subjects attained higher scores on the Flexibility scale ($p < .05$), while the control subjects attained higher scores on the Sociability and Achievement via Conformance scales ($p < .05$).

Hypothesis: Achievement

It was stated in this hypothesis that the experimental group would achieve at a significantly higher level in the tool subjects of arithmetic, reading, and spelling than would subjects in the control group. The analysis of the data did not support this hypothesis. The experimental subjects made essentially the same progress during the project period as did the control subjects.

Additional Relevant Findings

The experimental subjects who participated in the In-School and Community Work Experience programs reported that these programs were the most helpful learning activities provided them during their school attendance.

Analysis of the two groups concerning communication with parents indicated that the youth in the experimental group did converse with parents significantly more than was true of youth in the control group. This difference reached the .05 level of confidence.

Significantly more experimental subjects received services from the Public Health Department as a result of additional referral services. The same held true in regard to receiving public assistance.

Implications

Implications of this study are discussed under the following headings: (1) Administrative Plans, (2) Personnel, (3) Curriculum, (4) Facilities, (5) Community Resources, (6) Vocational Rehabilitation, (7) Selection and training of Personnel, and (8) Home-School Relationships.

Administrative Plans

Initiating and implementing an educational program for the type of youth served in this study requires competent plans for administration, supervision, and coordination. Programs of this type are complex in nature because they include youth who have many and varied problems. Education for them should, of necessity, be individually tailored to meet these specific and unique needs. General administrators and supervisors do not, as a rule, have the time to devote to a program which is so demanding. As is true in all programs, the quality of the program is no better than the leadership. Programs of this type should require especially strong leadership. Thus, specially trained administrative personnel must be employed.

Specific procedures for screening and identifying youth who are in need of the special services such as those provided in the experimental project should be included in every school testing program. Screening and referral can be facilitated by providing school personnel with workshops which discuss the ways in which the problems of these youth are manifested. Such workshops should help school personnel make better use of achievement test data, observations, attendance records, psychological reports, medical reports and other data found in cumulative folders. Screening and identification should be a continuous process with systematic re-evaluation of the effectiveness and efficiency of the identification procedures.

Criteria for eligibility for the program should be carefully spelled out and interpreted to school personnel. An admission and dismissal committee composed of key school personnel is frequently very advantageous.

To implement the instructional program, special classes in certain selected areas seem to be effective. In addition, plans need to be made for integrating youth into regular classes where success is possible. Such plans would of necessity require flexible scheduling. The ratio of teacher to youth should be no greater than one to 20. Since these youth need more individualized instruction, more reassurance, and more feedback than the average youth.

It is imperative that an adequate system of record keeping is developed. Designing of forms to streamline and insure record keeping is essential. The system of recording and filing of data should provide sufficient detail, on the one hand, but, on the other hand require a minimum amount of professional time. Time spent in developing a record system prior to the initiation of the project is time well spent. The data that is compiled must be meaningful to those who use the data. This data should be appropriate to achieving the goals of the program as well as provide for its evaluation. The evaluation program should include a follow-up of all youth who have participated in the special program.

Budgets should reflect a recognition by the top administration and board of education that such a program entails greater costs per pupil than for the so-called average youth. Reduced class loads, more specialized and intensive services, special equipment and materials of instruction, and transportation all make for a more expensive program.

Provisions for a public relations program which presents the special provisions for these youth in such a way as to elicit understanding, acceptance, and support among the school staff, pupils, parents, and the lay community should be made.

Personnel

An adequate program must include personnel from various disciplines if these youth are to be provided with essential services. It would seem crucial to the operation of the program that a school staff would include teachers with special training, psychologists, social workers, prevocational counselors, educational counselors, and supervisors and/or an administrator of the program. A counselor from the Division of Vocational Rehabilitation would be an important and integral member of a total rehabilitative team. Other ancillary services that should be made available are the services of nurses, doctors, dentists, and psychiatrists.

Curriculum

The curriculum for these youth must be functional, individualized, and vocationally oriented. The progressive work program seemingly should be the focal point of the curriculum with the academic work stressing those learnings which promote the acquisition of knowledge and skills needed to insure vocational success.

The findings of this study suggest that these youth may, in fact, be approaching their limits in terms of vertical attainment in the academic areas. It may well be that at this point in their development the best that can be hoped for is that these youth are helped to use whatever academic skills they have achieved in situations which are directly related to their social-vocational development. On the other hand, it may be that a different approach to remediation than that used in this project could result in more significant gains. It would seem probable that initiating a remedial program or preferably a preventive developmental program at an early age might result in significant gains in academic areas.

Developing the academic curriculum for such a program is very difficult and requires a specialist in curriculum construction. Schools should strongly consider including such a person on the staff to work closely with teachers during the school year and during the summer months. The curriculum should be directly related to specific local conditions as well as state and regional needs.

Facilities

The size, shape and location of the physical facilities is dictated by the content of the program. For example, laboratories should be provided to allow for the teaching of vocationally oriented skill development. Counseling rooms for prevocational counseling, educational counseling, and individual and group social casework are essential.

In-School Work Experience Laboratories are an integral part of this program. Depending upon the over-all administrative plan, consideration might be given to purchasing mobile units for the In-School Work Experience phase of the program in addition to or in place of having a central laboratory.

Community Resources

To insure close working relationships with community agencies and groups, it may be well to have a broadly representative advisory committee. Such an organization may be especially helpful during the initial stages of launching the program.

There is no substitute for face to face meetings when developing a good working relationship with an agency. Periodic meetings to clarify and/or develop more effective procedures are desirable when school personnel and representatives from an agency are working toward common goals.

Every effort should be made to become familiar with and utilize all resources, both public and private, that provide services to this segment of the school population.

Vocational Rehabilitation

The Division of Vocational Rehabilitation has the primary responsibility for helping the schools vocationally rehabilitate these youth. This agency hopefully will have sufficient counselors to serve such a program. The working relationship between the school and DVR which should be a mutually reinforcing one, requires joint planning for individuals, delination of agency responsibilities, and evaluation of the total rehabilitative process. The DVR counselor should become a member of the rehabilitative team as soon as the youth is admitted to the program and should serve as consultant in all matters that deal specifically with the vocational rehabilitation of the youth.

In order for the DVR counselor to function effectively as a member of the team, he must have access to all pertinent information in the school records. Likewise, the DVR counselor records should be available to appropriate school personnel.

The DVR counselor and the prevocational staff must work closely with the parents of the youth to enlist their assistance in helping their child develop and attain a vocational goal.

A close working relationship between DVR and the school, such as that developed in this project, assists the youth in making a smooth and immediate transition from the school to a trade school or full-time employment in the community.

The numerous significant findings of improved vocational adjustment in this study strongly suggest the need for the school and DVR to join forces and provide cooperative rehabilitative services to such youth.

Selection and Training of Personnel

It is felt that the personal characteristics of teachers are of utmost importance to their success when working with this type of youth. Teachers should be carefully screened before being allowed to enter this specialized field. Personal attributes of particular importance include emotional stability, maturity, respect for the individual, friendliness but firmness, consistency, creativity, and flexibility. Ability to work as a member of a team is also important.

Teacher training institutions should develop training programs to prepare teachers for working with such youth. Their program should include a practicum early in their training. A formal background of training in a vocational area is highly desirable. Course work in teaching the tool subjects and in remediation and correction of deficits utilizing a vocationally oriented approach should also be included in the formal training of these teachers. Course work in sociology and anthropology which would give teachers a background for understanding the cultural and social factors associated with this segment of the population should also be helpful when teachers work with such youth and their parents.

Public schools should not expect institutions of higher learning to take the entire responsibility for keeping school personnel up to date on research findings and new developments. Therefore, the school should develop a well organized program of in-service training utilizing various methods and techniques that have proved to be effective. Innovative approaches to in-service training should also be developed.

Home-School Relationships

Contacts between parents of youth such as in this project and school personnel, unfortunately have been largely precipitated by problems. These experiences coupled with their own frequent lack of success in school has tended to create a gap between home and school. The findings of this study, however, indicate that the parents would like for their children to graduate from school and obtain a good job. Again, unfortunately, they do not know how to help their children. The school must devise ways of working with parents that will elicit their cooperation and support of the special program, provide them with information, and train them to help their children. Individual and group social casework seem to be of help in this respect. Counseling of parents by prevocational counselors and DVR counselors also has proved to be highly valuable.

Problems Encountered During the Course of the Study

Identification of Subjects

One problem encountered early in the study was the identification of subjects. Initially school personnel tended to refer youth with severe acting out behavioral problems without considering other important criteria. Thus, youth who were not slow learners and were not from low SES status homes were sometimes referred. Many who scored within the average range of intelligence were referred because of educational retardation and poor grades. Attendance problems were also referred but, again, regardless of other criteria. Screening, identification, and decision making regarding eligibility for the project was a time consuming procedure. Some time was saved through carefully planned meetings designed to explain characteristics of these youth to principals, guidance counselors, and teachers.

Services of additional psychologists on the school staff were initially required to assist the project psychologist in administering scales necessary to assess the pupils' functioning on the criterion variable. This additional psychological service hastened the identification process.

Personnel

Since there was no specific training program at an institution of higher learning designed to prepare teachers for positions in this project, the problem of securing the project staff demanded a great deal of time and effort. It was felt that project teachers should have an academic background and/or experience in a vocational area such as industrial education, home economics, and business education, as well as an ability to teach in the tool subject areas. Training and, when possible, experience in special education were also considered important. Since fully trained personnel were unavailable, it became necessary to employ those who had the necessary personal attributes as well as basic training in a vocational area. They were then required to enroll in the university courses that were felt to give them an essential understanding for working with such youth. Concurrently, the project director and coordinator of prevocational education conducted in-service training on a regularly scheduled basis with project personnel.

The problems of the youth were very severe and seemingly bringing them together in classes accentuated their problems for a time. It appeared that negative behavior was being reinforced by their peers. At the beginning, project teachers had difficulty handling behavior problems and for a time teacher mortality loomed up as a threat to the project. As teachers began to understand the youth, they began to realize that these youth were not personally attacking them but were merely venting their hostility toward school and society in general. As a result, teachers became less threatened and better able to cope with the problems that arose in the classroom.

In a project of this magnitude with so many disciplines working as a team, communication was initiatlly a problem. Regular group meetings and regularly scheduled conferences among personnel minimized this problem.

Materials of Instruction and the Curriculum

Commerically prepared materials suitable for use in this project were not available at the start of the project. For the most part, teachers used portions of various publications where possible and then devised additional instructional materials. Teachers were allotted two periods daily for preparation of materials and planning. Additional time was allotted during the summer to work on the curriculum.

Although teachers were expected to devise the curriculum in accordance with the goals of the experimental project, these teachers were not specialists in curriculum development. There was considerable variability among the group in their ability to write resource units and to develop an integrated curriculum. Although the curriculum that was developed was more functional and vocationally oriented than the traditional curriculum, the problem of developing a refined curriculum persisted throughout the project.

It soon became evident to project staff that a refined curriculum worthy of distribution would not be possible within the scope of the time, funds, and personnel available to this project. It is hoped that some fund granting agency will liberally support a curriculum development project for comparable youth which is able to utilize the special skills and knowledge of curriculum experts as well as the knowledge and skills of the disciplines that were represenced by personnel in the project. Hopefully, this curriculum will be made available on a nationwide basis.

Methodology and Techniques of Teaching

Initially teachers tended to revert to the more traditional methods and techniques of instruction. Although they were aware that the youth had experienced a preponderance of failures in school with traditional methods, they, themselves, felt more secure using methods with which they were familiar. While teacher behavior did change over the period of the project years, it is now felt that a theoretical model for instruction might be very useful in bringing about a real change in teacher behavior. One advantage of a theoretical model would be that it might assist teachers in analyzing their methods and techniques for eliciting pupil responses. Since these youth are deficient in communication skills, perhaps a communication model such as that developed by Osgood (1957) could serve to guide the instruction of these youth.

Discipline

Although all youth who presented severe school discipline problems were not eligible for the project, these subjects typically manifested the major discipline problems apparent in the school. As the impact of the treatment program began to take effect and as teachers became more adept at averting serious discipline problems, the general over-all behavior of the group improved. It must be remembered that many disciplines and agencies were cooperatively working with the youth and their parents to bring about desirable changes.

Facilities

Existing classroom facilities were not appropriate for the experimental program, therefore, the Champaign School Board provided funds to renovate space specifically for the project. Problems of planning, budgeting, and lag time were encountered while making these changes.

Scheduling

Since the educational program for each youth was approached on an individual basis, scheduling was a real problem. Since the progressive work program was the focal point around which classes had to be scheduled, untold number of conflicts between and within class, employer, and individual schedules had to be resolved. For example, integration into regular classes necessitated coordination not only with the progressive work committment but also with enrollment in special classes. Cooperation between key personnel in the project and the administrative staff of the high school enabled successful scheduling of each individual so that he was provided with a meaningful program.

Acceptance of the Program

Any program that is different encounters resistance and thus requires considerable interpretation. An all out effort was made to give youth, parents, regular teachers, and administrators a thorough interpretation of the project. Once a youth was enrolled in the experimental program and experienced success and satisfaction, the problem seemed to resolve itself. In fact, many control subjects requested to be admitted to the experimental program. This, of course, posed additional problems.

Collection of Post Data

It was not only difficult to obtain post data on subjects who dropped out of school from both the experimental and control groups, it was literally impossible in some instances when the subject had joined the armed forces or covertly left town. In other instances, dropouts were so hostile they refused to return for an evaluation even though they would have been paid for their efforts.

Since attrition was so high, special caution had to be observed when statistically analyzing the project. Fortunately the number of subjects included in the research was such that even after the loss of subjects, the remaining number was sufficiently large enough to adequately evaluate the program.

Recommendations for Further Research and Programming

The findings of this research project indicate a need for the following investigations:

- Since most approaches for accelerating academic achievement among these youth have resulted in negative findings, other innovations must be developed and tested. One study might be to determine the extent to which academic achievement can be promoted by the use of teaching machines and vocationally oriented programmed materials.

- Since dropping out of school severs all ties of the youth with an educational institution, a study is needed to test the efficacy of a special vocational program housed in a separate building for school-age youth who are either dropouts or who are extremely negativistic toward school and are on the verge of dropping out. This approach might be considered as a "half-way school" where the goal would be to rehabilitate the youth to the point where he could go back to the school in the regular program or in a combination of a special and regular program. The emphasis would be on the establishment of and working toward the youth's vocational goal. Personnel from Vocational Rehabilitation should be closely involved with these youth from the time they are admitted to the "half-way school".

- Various approaches for fostering improved social and emotional adjustment among these youth should be investigated. One approach might be a type of family therapy where a psychiatrist, counseling psychologist, or group social worker with this type of specific training and skills would work with the whole family as a group, sometimes even including relatives or other significant persons.

  Another possible approach might be one whereby the teachers would become a teacher therapist who would work with the youth, teaching him not only academic or vocational concepts, but also how to handle behavioral problems. They might also work closely with parents handling problems that teachers ordinarily are not trained to handle. These teachers would undergo intensive in-service training and be closely supervised by a qualifed therapist.

  Still another approach might be for a professional, trained to cope with social and emotional problems, to work with significant adults in the area where there is a concentration of this type of youth. These adults would be employed to work with the youth and with their parents under the close supervision of such a therapist.

- It would seem worthwhile to test on a research basis a camp-like program for youth enrolled in the late elementary and early junior high years. These youth would be transported to a site provided by the school and supervised and instructed by school employees. The focus would be on the development of desirable social skills through structured activities requiring youth to work together to achieve common goals. An educational program taking advantage of the offerings of this environment would be provided. This type of program might be conducted for the entire school year, for a summer, or for short but significant periods of time throughout the year.

- Various approaches for providing these youth with recreational activities to enhance their social skills should be developed and tested. For example, making use of existing school facilities after school, during the evenings, and on Saturdays and holidays offering a wide range of recreational activities supervised by personnel who understand these youth and can work effectively with them should be considered. The entire families might be included in such a program.

- Educationally oriented tours of the country with groups of these youth should provide staff with an opportunity to not only promote improved social skills among these youth but should also broaden their experiential background and foster among them a desire to participate in the advantage of their broader cultural heritage.

- An investigation needs to be made of the cost to society of school dropouts, delinquency, and unemployment among such youth versus the cost of an intensive cooperative Vocational Rehabilitation School program such as the one in this study which increased the school holding power and promoted improved vocational adjustment of youth. Data on amount of money earned over a period of years, levels of jobs held, unemployment records, violations of law, and financial dependency on agencies are some important areas that should be included in such a study.

- Since the treatment program for the male subjects in this study was more effective than with the females, approaches need to be developed and tested that will more adequately rehabilitate females.

- Characteristics of successful teachers, methods of identifying these characteristics, and training programs designed to prepare teachers for working with these youth need to be investigated.

- Studies need to be conducted to determine the effectiveness of various approaches to in-service training of teachers and other personnel working with these youth.

- The use of an instructional model in changing teacher behavior in the classroom would seem to be worthy of pursuing on a research basis.

- The development of a community type program which involves all the family members of these youth and focuses on their rehabilitation should be evaluated. In such a program community resources including the school and DVR should be coordinated. The program might well extend from the preschool to the geriatric levels. Comparison groups might be identified in comparable communities. Such a study would need to be conducted on a longitudinal basis.

- Since the progressive work program and vocational counseling seem to have had the greatest impact on these youth, a radically different approach to teaching - learning should be evaluated. Such a plan would involve vocational facilities wherein salable products would be produced on a mass scale. All academic work would be based on the specific needs of the youth as related to their program. The organization would be set up on a corporate type basis. All youth would be shareholders according to a set of well developed criteria and would share in the profits of this organization. A comparable group of youth in a traditional program would serve as the controls. The vocational adjustment of these youth in subsequent years would be the prime factor evaluated.

- The effectiveness of an industrially oriented program using non-certified tradesmen as vocational teacher assistants and as models for the youth should be investigated.

- Studies need to be conducted to determine the most effective and efficient ways of identifying these youth, especially at an early age. The effectiveness of various experimental preschool and elementary programs for such children need to be evaluated, especially in terms of prevention of school dropouts, delinquency, and unemployment.

- Instruments that more appropriately and sensitively measure motivation, attitudes, self-concept, vocational aptitude, interests, social skills, vocational adjustment, and the effectiveness of in-service training, teacher preparation, and selection of teachers need to be developed.

- Since the social adjustment of the experimental subjects in the vocational setting was better than that of the controls, as evidenced by better work records, follow-up studies should be made to determine whether or not this improved social behavior generalized in time to other social situations such as encounteres with law enforcement agencies.

REFERENCES

Allen, C. M. *Combating the Dropout Problem*. Chicago: Science Research Associates, Inc., 1956.

Arnholter, E. B. School persistence and personality. *Personnel and Guidance J*., 1956, 35, 107-109.

Baller, W. R. A study of the present social status of a group of adults who, when they were in elementary school, were classified as mentally deficient. *Genetic Psychol. Monogr*., 1936, 165-244.

Bowman, P. H., & Matthews, C. V. Motivations of Youth for Leaving School (Project No. 200, Cooperative Research Program, U. S. Office of Education, Quincy, Illinois: U. of Chicago Youth Dev. Project, Sept. 1960), 86-87.

Burchill, G. W. *Work-study Programs for Alienated Youth*. Chicago: Science Research Associates, Inc., 1962.

Cantoni, L. J. Stayins get better jobs. *Personnel and Guidance J*., 1955, 33, 531-533.

Citizens' Committee on Children of New York City, Inc. *Children Absent from School*. New York: The Committee, 1949.

Cline, E. C., & Karnes, Merle B. A bridge from high school to work. *Rehabilitation Record*, 1963, 4 (2), 15-17.

Conference Proceedings, Golden Anniversary White House Conference on Children and Youth (March 27-April 2, 1960), Washington, D. C.: Golden Anniversary White House Conference on Children and Youth, Inc., 1960.

Coster, J. K. Attitudes toward schools of high school pupils from three income levels. *J. of Educ. Psychol*., 1958, 49 (2).

Deno, Evelyn. Vocational preparation during school years. Paper presented at Abraham Jacobs Symposium, A.P.G.A. Convention, April, 1965.

Dillon, H. C. Early school leavers. New York: National Child Labor Committee, *Publication No. 401*, October, 1949.

Dresher, R. H. Factors in voluntary dropouts. *Personnel and Guidance J*., 1954, 32, 287-289.

Engebretson, R. J., & Falk, H. A. *Dropout Study*. Office of Secondary and Vocational Education, St. Paul Public Schools, St. Paul, Minnesota, 1955.

Fairbanks, R. T. The subnormal child seventeen years later. *Mental Hygiene*, 1933, 17, 177-208.

Freedman, Marcia K. Perspectives in youth employment. *Children*, March-April, 1965, 75-80.

Glueck, S., & Glueck, Eleanor I. *Unraveling Juvenile Delinquency*. Commonwealth Fund, 1950.

Goldstein, H., & Heber, H. Preparation of mentally retarded youth for gainful employment. In J. H. Rothstein (Ed.), *Mental Retardation*. New York: Holt, Rinehart, & Winston, 1961. Pp. 307-326.

Gregg, W. L. A study of factors related to the persistence of pupils in public secondary schools. Unpublished doctoral dissertation, Cornell University, 1950.

Havighurst, R. J., & Stiles, L. J. National policy for alienated youth. *Phi Delta Kappan*, 1961, 42 (7), 284.

Healy, W., & Bronner, Augusta F. *Delinquency and Its Treatment*. Yale University, 1936.

Hilstand, D. L. *Economic Growth and Employment Opportunities for Minorities*. New York: Columbia University Press, 1964.

Jacobs, J. S. Some facts about school dropouts. Unpublished manuscript. San Diego: San Diego County Public Schools, Dec. 1954.

Johnson, Elizabeth S., & Legg, Caroline E. *Why Young People Leave School*. U. S. Department of Labor. Washington, D. C.: Government Printing Office, 1949.

Karnes, Merle B., & Others. *Prevocational Services for Handicapped Youths*. Champaign, Ill.: Champaign Public Schools and State of Illinois Division of Vocational Rehabilitation, p 1, 1961.

Kennedy, R. J. The social adjustment of morons in a Connecticut city. Willport, Conn.: Commission to Survey Resources in Connecticut, 1948.

Kolstoe, O. P. The employment evaluation and training program. *J. of Mental Deficiency*, 1960, 65 (1), 17-31.

Kolstoe, O. P. An examination of some characteristics which discriminate between employed and not employed mentally retarded males. *J. of Mental Deficiency*, 1961, 66, 472-482.

Kolstoe, O. P. Employability prediction for mentally retarded adults: A methodological note. *Amer. J. of Mental Deficiency*, 1961, 66 (2), 287-289.

Kvaraceus, W. C. Juvenile Delinquency and the School. World Book, 1945.

Layton, W. K. Special services for the dropout and the potential dropout. New York: National Child Labor Committee, *Publication No. 408*, October, 1952.

Lazare, D. *These Left Before Graduating*. Tacoma, Washington: Tacoma-Pierce County Study of Education for Exceptional Children.

Longstreth, L. E., Stanley, F. J., & Rice, R. E. Experimental evaluation of a high-school program for potential dropouts. *J. of Educ. Psychol.*, 1964, 55 (4), 228-236.

McCreary, W. K.; Kitch, D. E. Now hear youth. *Bulletin of the California State Department of Education*, 1953, 22 (9).

Matthews, C. V. Sorenson, F. Proposal submitted to the Office of Education entitled Demonstration: An educational program for slow learners in grades 7 through 12. December 1, 1964. (Mimeographed) Also Status Report sent to U. S. Office. (Mimeographed)

Merrill, Maude A. *Problems of Child Delinquency*. New York: Houghton, Mifflin Co., 1947.

Neff, W. S. The success of a rehabilitaion program: A follow-up study of the clients of the Vocational Adjustment Center. *Monogr. No. 3*. Chicago: The Jewish Vocational Services, 1959.

Neimeyer, John H. Pres., Bank Street College of Education: New York, New York.

Norton, J. K. Changing demands in education and their fiscal implications. Prepared for the National Committee for Support of Public Schools, Washington, D. C., 1963.

Novak, B. J., & Sundheim, Mina E. Careers for potential dropouts. Education, 1964, 85 (4), 199-205.

Ogden, Lynn. & Novak, B. J. Why thirty graduates failed the job. *Amer. Vocational J.*, December, 1951. P. 26.

Osgood, C. E. *Motivational Dynamics of Language Behavior*. Nebraska Symposium on Motivation. Lincoln, Nebraska: University of Nebraska Press, 1957. Pp. 339-424.

Ott, C. *Dropout Study*. Jefferson County Pupil Personnel and Research Department, 1959, Louisville, Kentucky.

Peckham, R. Problems in job adjustment of the mentally retarded. *Amer. J. of* Mental Deficiency, 1951, 56, 448-453.

Penty, Ruth C. *Reading Ability and High School Drop-outs*. New York: Bureau of Publications, Teachers College, Columbia University, 1956. Pp. 73-74.

Peterson, L., & Smith, L. L. A comparison of the post-school adjustment of educable mentally retarded adults with that of adults of normal intelligence. *Exceptional Children*, 1960, 26, 404-408.

Phelps, H. R. Post-school adjustment of mentally retarded children in selected Ohio cities. *Exceptional Children*, 1956, 23, 58-62.

Procedures for the Identification of Potential High School Drop Outs, Office of the Superintendent of Public Instruction, State of Illinois, 1962, p. 1.

Quincy Youth Development Commission. Curriculum demonstration program training school. Mimeographed Addendum to Proposal # 154 Submitted to U. S. Commissioner of Education, Quincy, Illinois, 1964.

Reynolds, M. C., & Stunkard, C. L. A comparative study of day classes vs. institutionalized educable mentally retarded. Project 192, Minneapolis, Minnesota: College of Education, University of Minnesota, 1960.

Rogers, L., & Murphy, T. J. A high school work education program. In J. Rothstein (Ed.), Mental Retardation. New York: Holt, Rinehart, & Winston, 1961. Pp. 327-331.

Rohrer, J. H. Psychosocial development and acting out behavior. In D. Schreiber (Ed.), *The School Drop Out*. Washington, D. C.: National Education Association, 1964.

Schreiber, D. An introduction to the school drop out. In D. Schreiber (Ed.), *Guidance and the School Drop Out*. Washington, D. C.: National Education Association, 1964.

Segal, D., & Schwarm, O. J. Retention in high schools in large cities. Washington, D. C.: U. S. Department of Health, Education, & Welfare, *Bulletin 1957, No. 15*.

Sheldon, P. M. Mexican Americans in urban public schools: An exploration of the dropout problem. (Mimeographed) Laboratory in Urban Culture, Occidental College, Los Angeles, California, 1958.

Sheldon, W. H., & Others. *Varieties of Delinquent Youth*: *An Introduction to Constitutional Psychiatry*. New York: Harper, 1949.

Smith, H. Syracuse youth did not graduate. Research Divison, Board of Education, Syracuse, New York.

Snepp, D. W. Can we salvage the dropouts? *Clearing House*, 1956, 31, 49-54.

Stebbins, Marion. Flint offers the potential drop out a personalized curriculum. Clearing House, 1963, 38 (4).

Stevens, H. A., & Heber, R. *Mental Retardation*: *A Review of Research*. Chicago: University of Chicago Press, 1964.

Stone, Carol L. High school dropouts in a rural county, their problems and adjustments. Pullman: Washington Agriculture Experiment Stations, Institute of Agricultural Sciences, State College of Washington, *Bulletin 565*, March 1956.

Tannenbaum, A. J. *Dropout or Diploma*. New York: Teachers College Press, Teachers College, Columbia University, 1966.

Testimony of the Juvenile Delinquency of Youth Offenses Control Act of 1961, July, 1961, before the Special Subcommittee on Education, Committee on Education and Labor, U. S. House of Representatives, on House Bill 7178.

U. S. Department of Labor, Bureau of Labor Statistics. *Occupational Outlook* Handbook. Washington, D. C.: Government Printing Office, 1961. P. 26.

U. S. Office of Education. *Biennial Survey in the United States: 1948-1950.* Washington, D. C.: Government Printing Office, 1953. P. 15.

Van Duke, L. A., & Hoyt, K. B. *The Dropout Problem in Iowa High Schools.* Iowa State Department of Public Instruction, 1958.

Venn, G. Man, Education, and Work. Washington, D. C.: American Council on Education, 1964.

West, Margaret W. Follow-up study of the post-school adjustment of EMH graduages from Evanston Township High School from 1953-1964. (Mimeographed report) Summer, 1961.

Wolfbein, S. L. *Employment and Unemployment in the United States.* Chicago: Science Research Associates, Inc., 1964.

Work Conference on Life Adjustment Education. Why do boys and girls drop out of school, and what can we do about it? Circular 269, Washington, D. C.: U. S. Department of Health, Education and Welfare, Office of Education, 1953.

APPENDIX

Prevocational Department Forms *

Referral for Prevocational Services

Teachers, counselors, project staff, and school administrators refer pupils to the Prevocational Department by completing a referral form. Upon receipt of this form all pertinent information relative to the pupil is assembled and reviewed. A conference between the initiator of the referral and the Prevocational Coordinator is then held and a determination of eligibility of the pupil is made. In some instances a staffing attended by professional personnel working with the pupil is required to determine eligibility and the nature of the service needed.

Pupil Prevocational Record

Each prevocational counselor maintains a casebook for ready reference on matters concerning any of his pupils. The Pupil Prevocational Record is kept in the casebook and contains all vital information relative to the pupil. On the reverse side of the form the counselor writes short notes on his contacts with or concerning the pupil and uses these notes to complete the counseling record at the end of each day.

Counseling Record

The counseling record form records the day by day contacts between the personnel of the Prevocational Department and the pupil, his employer, teachers, and parents. The growth made by the pupil is readily discernible by reviewing this record of counseling activities.

Educational Record

The prevocational counselor must be aware of the pupils' academic achievement in order to provide realistic services during the time the pupil is attending school. Planning of and working toward long term vocational goals require up to date knowledge of the pupils' educational progress.

Work Record

Prior work history of each pupil is recorded on a specific form designed for this purpose. This vocational history provides meaningful information that is helpful to the prevocational counselor in the placement of the pupil on either an in-school or work-study job.

Job Specification

Each school administrator is enlisted to assist in the identification of part-time jobs within the school setting which are appropriate for project pupils. Individually, or in conjunction with the Prevocational Department, he outlines the requirements of the job. The prevocational counselor then identifies specific pupils who are suited, by choice and ability, for this particular job. These pupils are then interviewed by the school administrator and/or academic or non-academic employee who makes the final selection.

Notice of Employment - In-School Cooperative Work Experience Program

As soon as a pupil has been hired for an in-school job, but before his first day at work, a notification of employment is completed, signed by the pupil employee, the employer, and other designated staff members. Copies of this form is then distributed to appropriate school personnel.

Pupil Evaluation - In-School Cooperative Work Experience Program

The major purpose of the In-School Work Experience Program is to foster the acquisition of good worker traits. The evaluation form is completed monthly by the in-school employer on his pupil-employee. This monthly evaluation, in addition to the prevocational counselor's interviews with the pupil and the in-school employer provides for continuous evaluation of the pupil's vocational progress. Self evaluation by the pupil is encouraged as a means of teaching self-realization.

Community Work Experience Agreement

The Prevocational Department requires that the pupil and employer sign a work agreement form. This form delineates the responsibility of the pupil and the employer and the intent of the formal signing of the agreement is to impress upon the pupil-employee especially his responsibility to the employer and to the school.

Notice of Employment - Community Work Experience Program

The administrative staff of the pupil's attendance center is notified of the work-study placement of each pupil by this form.

Pupil Evaluation - Community Work Experience Program

Community Work Experience employers are asked to complete a monthly placement follow-up form on each pupil-employee. The form is designed to provide a comprehensive evaluation of the pupil's progress but requires a minimum amount of employer time.

Report to Principal - Work Experience Job Termination

Immediate notification of job termination is made to the administrative staff of the pupil's attendance center by using this form.

Follow-Up Interview with Graduate or School Dropout

Program evaluation leading to improvement requires a follow-up of former pupils. Information recorded on the follow-up forms are used by project personnel to gain a better understanding of the former pupils' adjustment to the world of work. In addition, these forms provide information which is useful in the evaluation of the offerings of the school to this group of youth.

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* Forms available upon request to Guy R. Jones, Prevocational Coordinator, Champaign Community Unit #4 Schools, 705 South New Street, Champaign, Illinois, 61820.

GUIDANCE QUESTIONNAIRE

Your Name______________________ Age_______ Grade_______

1. Have you more or less decided what you'd like to do one day for a living?

   If YES, say what career you have decided on______________________

2. What made you decide on this particular career? Please describe fully______

   ____

   ____

   ____

3. If you were to go into this kind of work, what part of it do you think you would enjoy most?______________________

   ____

4. What abilities or personal qualities do you have which you feel will be in your favor if you go into this kind of work?______________________

   ____

   ____

5. Who has encouraged you to make this your career?______________________

   ______________ What reasons do they give?______________________

   ____

   Who has advised you against going into this kind of work?______________

   ____

   What reasons do they give?______________________

   ____

6. How certain are you that this is the right career for You? Underline one of the following:

   Very sure Fairly sure Not sure

   Explain why you feel this way about it______________________

   ____

   ____

7. Is there anything (for example; lack of money, low grades, family opposition) that might prevent you from getting into this kind of work? If so, say what? ____________________________

8. If, for some reason, you have to give up the idea of entering this occupation, what might you do instead? ____________________

9. What job would you like to be doing when you're thirty? __________

____

10. What occupations or careers have you considered so far (even though you may have changed your mind about them)? __________________

____

What made you change your mind about them? ________________

____

____

____

11. What occupations have your parents suggested you look into? ________

____

Why do they think that these would be good occupations for you to look into?

____

____

12. Are your parents leaving the choice of a career up to you? __________ Even though they may not want to influence you, what occupation do you think they would most like for you to enter? ________________

13. Are there any kinds of work that your parents would definitely not like to see you go into? ____________________________

14. Where does your father work?____

What does he do? (for example: janitor, clerk, machine operator, truck driver)

____

15. How would you like to do the same kind of work as your father? Yes_____No____

What are some of the things you think you might like about his job?__________

____

What things would you definitely not like?________________________________

____

16. How would your best friend describe you?_______________________________

____

____

How do you think somebody who knows you very well, but doesn't particularly like you, would describe you?____

____

____

17. How many brothers do you have?____________________How many brothers are working?_______________ How many sisters do you have?__________________

How many sisters are working?_______________ What kind of work do they do?___

____

18. Have you any friends who are working?________If so, what kind of work do they do____

19. Does your mother work?________ If so, what does she do?________________

What kind of work did your mother do before she got married?______________

20. Do you have any uncles?__________ What kind of work do they do?_____________

____

21. Do you have any aunts who are working? __________ What do they do? ________

____

If they aren't working now, what work did they do before they got married?

____

22. Do you know anybody who has what you would consider a really good job?

What job? ____ Why do you feel it is

such a good job? ____

____

23. Have people ever told you that you were cut out for a certain type of work?

____________ If so, say what ________________________ and why they think

you would do well in this type of work.___________________________________

____

24. What are some of the things that you feel will be in your favor in making a

success of life? ____

____

What are some of the things that you feel might prevent you from being as

successful as you'd like to be?____

____

____

25. What are some of the things which you feel you can do better than most people

your age? ____

____

26. What grade do you expect to finish before you leave school?________________

27. What do you intend to do immediately upon leaving school?

Get a job?____________ If so, what kind of job?________________

Continue your education?__________Where?________________

Get special training?____________What kind of training?________________

Where?________________________________

28. Have you any hobbies?_______ If so, what are they________________

____

29. What are the three things that you like to do most in your spare time?______

____

If you had the time and money, what other things would you like to do in your spare time?________________________________

30. Which of your personal possessions (things that you have been given or that you have bought with your own money) do you prize the most?__________

____

31. Each person has a different idea of what it means to make a success of life. What do you feel you would have to do, or be, or have, in order to consider yourself a success?________________________________

____

32. Is there any subject that you feel you know more about than most people your age? If so, say what it is________________________

33. Are you saving up for anything particular at the moment?______What are you saving up for?________________________________

What are some of the things that you have bought with your own money in the past?________________________________

. Have you ever belonged to a club or a society that you really got a great deal of pleasure out of?________ If so, say what kind of club or society it was______________________________________and what made it such an enjoyable experience for you____

. Is there any particular subject that you like to read about (in the newspaper, in magazines, in books). What? ____

. As you look back, what are some of the things in life that have given you greatest pleasure?____

____

. Is there anything that you have been interested in for as long as you can remember?__________If so, say what it is_______________________________________

. Which of the things that interest you at the moment do you feel you will keep on being interested in?____

. As you look back, what are some of the things which you were interested in for a while and then quickly lost interest in?___________________________________

____

What made you lose interest?____

____

. What are some of the things you like to talk about to your friends?__________

____

What kinds of things are your friends most interested in?____________________

____

. What are some of the things you feel you are quite good at?_______________

____

42. What are some of the things your friends will sometimes ask you to help them with?____

43. Is there anything that you do in your spare time which you feel you do fairly well?____

44. As you look back, can you recall anything you have done which brought you a lot of praise or made new friends for you?______ What was it?_________________

____

45. What are some of the things which you feel you are not much good at?_________

____

46. Is there anything that you have really tried very hard to become good at?___

If so, say what it is____

and how well you succeeded______________________________________

47. In which two subjects do you usually get your highest grades?_________________

______________________________What grades do you usually get in these two subjects?____

In which two subjects do you usually get your lowest grades? _________________

What grades do you usually get in these two subjects?_____________________

48. Do you feel your grades are a fair indication of your ability?_________________

49. Of all the courses which you have taken at school, which two did you like best?____ Why?____________________________

____

Which two did you like least? ________________________________Why?______________

____

50. Is there anything that you are really interested in that they don't teach at your school?_______ If so, say what it is______________________________

51. What would you say has been your greatest achievement or greatest success to date?______________________________

52. Have you any health problems (e.g. a weak chest, weak heart, weak eyesight etc that would affect the type of work you can do?______________________________

53. Have you ever been seriously ill?________Had a serious accident?__________
Had a serious operation?_________if so, explain______________________
____

54. Do you belong to any clubs, societies or organizations (out of school as well as at school)? If so, say which______________________________
____

55. Have you ever held a position of responsibility, out of school as well as at school? For example: games captain, secretary or chairman of a club, patrol leader in the Boy Scouts or Girl Scouts etc. If so, give details__________
____

56. Have you ever won a prize or an award of any type?______If so, give details___
____

57. What types of books and magazines do you enjoy reading most?______________
____

Name two books which you have read recently which you enjoyed very much_______
____

58. What occupations or careers would you like to know more about?____________
____

59. If you have any questions about any career which you are considering at the moment, write them down below.______________________________
____
____

60. Would you like some help in choosing and preparing for a career?__________

What kind of help do you feel would be most useful to you right now?_______

____

61. Do you have any other problems which you would like to discuss with a counselor? Sinply write YES or NO________________________________

62. Which would you prefer - an occupation which doesn't require very much training or one that requires a long period of training?__________________

Why?____

63. How keen are your parents that you should go to high school? Underline one of the following:

They very much want me to finish high school.
They will probably insist on it

They would like me to go, but they doubt whether
they will be able to swing it financially.

The would like me to go to high school, but they won't
insist on it.

They haven't said anything to me about it.

The feel that I will be able to get ahead without going to high school.

The feel that I should go to work so that I can contribute to the
expenses of the family.

64. Below is a list of 11 different types of occupations. Read the list very carefully, then decide:

1. In which three you would most like to earn your living, that is which three do you think are the most interesting. Indicate your choices (in order of preference) by writing 1, 2, or 3.
2. In which three do you think your chances of success would be best, that is in which three do you think you have the most ability. Indicate your choices (in order of preference) by writing A, B, or C.

Interest	Ability	
________	________	Work with machines and tools
________	________	Work with figures (arithmetic, Mathematics, etc.
________	________	Science and/or laboratory work.
________	________	Read and study reference books and other written material.
________	________	Work with people who are needy, underprivileged, sick or in trouble.
________	________	Work in an office and do clerical work, such as record keeping and the writing or typing of business letters.
________	________	Business activities, such as buying and selling.
________	________	Special artistic work, such as drawing, painting, creative writing, designing, music, acting.
________	________	Explain things to people or instruct and advise them.
________	________	Work with plants and/or animals.

65. We don't all want the same things in life, nor do we all want the same things in a job. Indicate what you want most in a job by reading the statements below and indicating whether they are of great importance to you, of medium importance or of little or no importance.

If it is Very important to you, write V
If it is only of Medium importance, write M
If it is of Little or no importance, write L

WHAT I WANT FROM A JOB

Write V,M or L

________ A chance to try out new ideas and new ways of doing things

________ Work that people look up to and respect

________ Work where I know exactly what to do

________ Work that is easy and I can do well

________ Work that pays enough for food, clothing, and car.

________ Work I can be sure of even when times are bad

________ Work with people I like

________ Work helping my fellow man

________ Work where I do things my own way

________ Work that pays very well

________ Work where I tell others what to do

________ Work with many different things

________ Work where I'm told what to do

________ Work that is challenging even if it is difficult

________ Work that I can do alone

66. Now go back and look at the statements you marked V. Rank them in order of importance by writing next to each V: 1 for the most important, 2 for the next in importance and so on for all the V's on your list. Do not rank the M's and L's

67. If you could be any of the following persons, which would you most like to be? (Choose 5) Write 1 next to your first choice, 2 next to your second choice, 3 next to your third, 4 next to our fourth and 5 next to your fifth choice.

__________ an honest and fair person

__________ a popular person (lots of friends)

__________ a person who finds school work easy

__________ a person who earns his own way

__________ a religious person

__________ a person with a sense of humor

__________ a person with lots of poise and confidence

__________ a person who can make up his own mind

__________ a person who doesn't let other people push him around

__________ a person who can work without being told what to do next

__________ a person who is neat appearing

__________ a person who is good at sports (football, basketball, etc.)

__________ a person who makes a lot of money

__________ a person who helps others

__________ a tactful person - gets along well with others

__________ a person that is liked by the opposite sex

__________ a person who can get help from others

__________ a leader

__________ a person who always finishes a job

__________ a person who will have a better chance in life than his parents had

__________ a person who always does his best

68. If you were to ask a friend who knows you very well to say which of the items in the preceding section best describe you, which three do you think he would choose? Make a cross (X) next to the three items you think he would select.

69. Of all persons whom you have known or read about, which two do you admire most?____

What do you admire about them?

71. Which three boys or girls would you most like to work with on a job.

First choice ______________________ Why? ________________

____

Second choice ______________________ Why? ________________

____

Third choice ______________________ Why? ________________

____

72. What are some of the improvements you would introduce if you were in charge of a school and wanted to have a really good school?

____

____

____

____

NAME______________________________

SCHOOL____________________________

DATE______________________________

DIRECTIONS: Put an "X" mark on the number to the right of each statement that best tells how you feel about the statement.

1	2	3
Lots of times	Sometimes	Hardly ever

SAMPLE

1. Do you enjoy playing by yourself more than playing with other people? 1 2 3

1. Is it easy for you to talk to your class? 1 2 3

2. Do you talk to the new children at school? 1 2 3

3. Is it hard for you to talk to new people? 1 2 3

4. Does it make you angry when people stop you from doing things? 1 2 3

5. Do you say nice things to children who do better work than you do? 1 2 3

6. Do you sometimes hit other children when you are playing with them? 1 2 3

7. Do you play games with other children even when you don't want to? 1 2 3

8. Do you help new children get used to the school? 1 2 3

9. Is it hard for you to play fair? 1 2 3

10. Do the boys and girls often try to cheat you? 1 2 3

11. Do you feel very bad when people talk about you? 1 2 3

12. Are many of the boys and girls mean to you? 1 2 3

13. Do you feel bad because people are mean to you? 1 2 3

14. Do many children say things that hurt your feelings? 1 2 3

15. Are many older people so mean that you dislike them? 1 2 3

16. Do you often feel so bad that you do not know what to do? 1 2 3

17. Would you rather watch others play than play with them? 1 2 3

18. Do you often do nice things for the other children in your school? 1 2 3

19. Are there many bad children in your school? 1 2 3

20. Do the boys and girls seem to think that you are nice to them? 1 2 3

21. Do you think that some teachers do not like the children? 1 2 3

22. Would you rather stay home from school if you could? 1 2 3

23. Is it hard to like the children in your school? 1 2 3

1. Is it easy for you to talk to your class? 1 2 3

2. Do you talk to the new children at school? 1 2 3

3. Is it hard for you to talk to new people? 1 2 3

4. Does it make you angry when people stop you from doing things? 1 2 3

5. Do you say nice things to children who do better work than you do? 1 2 3

6. Do you sometimes hit other children when you are playing with them? 1 2 3

7. Do you play games with other children even when you don't want to? 1 2 3

8. Do you help new children get used to the school? 1 2 3

9. Is it hard for you to play fair? 1 2 3

10. Do the boys and girls often try to cheat you? 1 2 3

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17. Would you rather watch others play than play with them? 1 2 3

18. Do you often do nice things for the other children in your school? 1 2 3

19. Are there many bad children in your school? 1 2 3

20. Do the boys and girls seem to think that you are nice to them? 1 2 3

21. Do you think that some teachers do not like the children? 1 2 3

22. Would you rather stay home from school if you could? 1 2 3

23. Is it hard to like the children in your school? 1 2 3

24. Do the other boys and girls say that you don't play fair in games? 1 2 3

25. Do the children at school ask you to play games with them? 1 2 3

26. Do you play with some of the children living near your home? 1 2 3

27. Do the people near your home seem to like you? 1 2 3

28. Do you need to thank everyone who helps you? 1 2 3

29. Are there people near your home who are not nice? 1 2 3

30. Do you have good times with people who live near you? 1 2 3

31. Are there many mean boys and girls who live near you? 1 2 3

32. Are you asked to play in other people's yards? 1 2 3

33. Do you have more fun near your home than other children do near theirs? 1 2 3

34. Are you often mad at people without knowing why? 1 2 3

35. Do the children think you can do things well? 1 2 3

36. Do the other children often do nice things for you? 1 2 3

37. Do you have fewer friends than other children? 1 2 3

38. Do most of the boys and girls like you? 1 2 3

39. Do people seem to think that you are not very smart? 1 2 3

40. Can you do things as well as other children? 1 2 3

41. Do people think that other children are better than you? 1 2 3

42. Are most of the children smarter than you? 1 2 3

43. Do you need to have more friends? 1 2 3

44. Do you feel that people don't like you? 1 2 3

45. Do you have good times with the children at school? 1 2 3

46. Are the children glad to have you in school? 1 2 3

47. Are you lonesome even when you are with people? 1 2 3

48. Do people like to have you around them? 1 2 3

49. Do most of the people you know like you? 1 2 3

50. Do lots of children have more fun at home than you do? 1 2 3

COULD YOU EVER_________

Directions:

Here are some things that boys and girls do, or think about doing. Read each item and check "Yes" if you think you could do it. Check "No" if you think you could not do it. Look at the sample below while I explain.

Sample

Yes____ No____ 1. Could you ever know how to dance?

Yes____ No____ 1. Could you ever learn how to swim?

Yes____ No____ 2. Could you ever teach a dog 10 new tricks?

Yes____ No____ 3. Could you ever eat a pint of ice cream by yourself?

Yes____ No____ 4. Could you ever play softball at school?

Yes____ No____ 5. Could you ever be the best liked person in your school?

Yes____ No____ 6. Could you ever play the leading part in a school play?

Yes____ No____ 7. Could you ever learn how to typewrite?

Yes____ No____ 8. Could you ever go down the highest slide-board in the park?

Yes____ No____ 9. Could you ever make "A" on every test you took in school for a year?

Yes____ No____ 10. Could you ever sew a button on your clothes?

Yes____ No____ 11. Could you ever teach your class if your teacher got sick?

Yes____ No____ 12. Could you ever fix a lunch to take to school?

Yes____ No____ 13. Could you ever play a guitar on TV?

Yes____ No____ 14. Could you ever go down town and buy yourself a toy?

Yes____ No____ 15. Could you ever make such good toys and games that people would buy them?

Yes____ No____ 16. Could you ever learn how to ride a bike?

Yes____ No____ 17. Could you ever write a poem?

Yes____ No____ 18. Could you ever make people do just as you told them?

Yes____ No____ 19. Could you ever learn to fly a rocket ship?

Yes____ No____ 20. Could you ever be a famous musician?

Yes____ No____ 21. Could you ever count from 1 to 40 without a mistake?

Yes____ No____ 22. Could you ever capture a gang of robbers?

Yes____ No____ 23. Could you ever have a maid in your house?

Yes____ No____ 24. Could you ever get anything you wanted just by wishing?

Yes____ No____ 25. Could you ever call the firemen to come to a house on fire?

Yes____ No____ 26. Could you ever be the president of our country?

Yes____ No____ 27. Could you ever read a book by yourself?

Yes____ No____ 29. Could you ever learn how to whistle?

Yes____ No____ 30. Could you ever take a picture with a Brownie camera?

Yes____ No____ 31. Could you ever be the smartest person in your school?

Yes____ No____ 32. Could you ever learn to climb a tree?

Yes____ No____ 33. Could you ever be a dentist?

Yes____ No____ 34. Could you ever be the most famous person in your state?

Yes____ No____ 35. Could you ever feed a pet dog or cat?

Yes____ No____ 36. Could you ever win a prize for dancing?

Yes____ No____ 37. Could you ever learn how to work a TV?

Yes____ No____ 38. Could you ever ride a horse?

Yes____ No____ 39. Could you ever be a hero of your country?

Yes____ No____ 40. Could you ever make a snow man?

Yes____ No____ 41. Could you ever go to a movie by yourself?

Yes____ No____ 42. Could you ever know how to tell time?

Yes____ No____ 43. Could you ever learn how to play checkers?

Yes____ No____ 44. Could you ever win a prize for coloring the best picture in your room?

Yes____ No____ 45. Could you ever fly an airplane all around the world?

Yes____ No____ 46. Could you ever own a bank?

Yes____ No____ 47. Could you ever put on all of your clothes without help?

Yes____ No____ 48. Could you ever become a teacher?

Yes____ No____ 49. Could you ever be a doctor?

Yes____ No____ 50. Could you ever go to college?

Yes____ No____ 51. Could you ever learn how to skate?

Yes____ No____ 52. Could you ever not be late at school for one week?

Yes____ No____ 53. Could you ever save 1 dollar?

Yes____ No____ 54. Could you ever be a famous movie star?

Yes____ No____ 55. Could you ever make a toy horse out of modeling clay?

Yes____ No____ 56. Could you ever write a book?

Yes____ No____ 57. Could you ever know how to comb your hair?

Yes____ No____ 58. Could you ever know all there is to know?

Yes____ No____ 59. Could you ever write a letter to a friend?

Yes____ No____ 60. Could you ever paint a picture so good that people would buy it?

Yes____ No____ 61. Could you ever go to the store and buy some groceries to take home?

Yes____ No____ 62. Could you ever tie you own shoes?

Yes____ No____ 63. Could you ever save a friend from drowning in the river?

Yes____ No____ 64. Could you ever wash the dishes after supper?

Yes____ No____ 65. Could you ever put a new light bulb in a lamp?

Yes____ No____ 66. Could you ever show someone how to find the principal's office?

Yes____ No____ 67. Could you ever help a 5 year old child cross a busy street?

Yes____ No____ 68. Could you ever have more money than anyone in the world?

Yes____ No____ 69. Could you ever set a table for dinner?

Yes____ No____ 70. Could you ever become a barber or beauty operator?

Yes____ No____ 71. Could you ever learn to drive a bus?

Yes____ No____ 72. Could you ever mail a letter at the post office?

Yes____ No____ 73. Could you ever be a famous boxer or dancer?

Yes____ No____ 74. Could you ever make a sled or a coat?

Yes____ No____ 75. Could you ever find the right bus to ride to town and back home?

Yes____ No____ 76. Could you ever invent a new gas engine?

Yes____ No____ 77. Could you ever carry out the trash for your mother everyday?

Yes____ No____ 78. Could you ever learn how to guide a sled?

Yes____ No____ 79. Could you ever own a food store?

Yes____ No____ 80. Could you ever wash your own hair?

Yes____ No____ 81. Could you ever go to a birthday party by yourself?

Yes____ No____ 82. Could you ever fix a broken automobile?

Yes_____No____ 83. Could you ever write a song?

Yes____ No____ 84. Could you ever call a friend on the telephone?